

DG-WA3000NP

300Mbps Wireless LAN Access Point with PoE

User Manual

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As our products undergo continuous development the specifications are subject to change without prior notice



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Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacturer must therefore be allowed at all times to ensure the safe use of the equipment.



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1. Product Information

1-1 Product Introduction

Thank you for purchasing DG-WA3000NP wireless LAN Access Point with PoE! With this high cost-efficiency wireless Access Point, computers and wireless devices which are compatible with IEEE 802.11n can connect to existing wired Ethernet network, at the speed of up to 300Mbps. DG-WA3000NP also supports power over ethernet which helps in easy installation, by eliminating the need of a dedicated power source for the access point.

With Quick Setup installation procedure, any computer user can setup a wireless network environment in very short time - within minutes, even inexperienced users. Just follow the instructions given in this user manual, you can complete the setup procedure.

Other features of this Access Point include:

- Complies with IEEE 802.11b/g/n wireless network standards works with other 802.11b/g/n wireless devices.
- Complies with 802.3af PoE standard.
- High speed wireless network, six times faster than conventional 802.11g wireless network (up to 300Mbps).
- Allows wireless devices to connect to existing wired network and share network resources.
- Supports 64/128-bit WEP, WPA, and WPA2 wireless data encryption.
- Supports RADIUS server, only allows users listed in your authorization server to use wireless network.
- Supports MAC address filtering (Only allows specific wireless device of your choice to connect to this Access Point).
- Supports DHCP server function.
- Supports point-to-point and point-to-multi point bridge function.
- Supports WDS (Wireless Distributed System) repeater mode.
- Supports Universal Repeater mode.

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- Supports AP Client mode.
- Supports four sets of ESSID to group the different wireless networks.
- Supports hidden SSID function.
- Supports WPS (Wi-Fi Protected Setup), simplifies wireless client setup procedures. Even inexperienced users can setup a wireless network without network technician's help!
- Easy to use web-based GUI (Graphical User Interface) for network configuration and management purposes.

1-2 Safety Information

In order to keep the safety of users and your property, please follow the safety instructions mentioned below:

- 1. This Access Point is designed for indoor use only; **DO NOT** place this Access Point outdoor.
- 2. **DO NOT** place this Access Point close to a hot or humid area, like kitchen or bathroom. Also, do not leave this Access Point in the car during summer.
- 3. **DO NOT** pull any connected cable with force; disconnect it from the Access Point first.
- 4. If you want to place this Access Point at a height or mount on the wall, please make sure the Access Point is firmly secured. Falling from a height would damage the Access Point and its accessories and warranty will be void.
- 5. Accessories of this Access Point, like antenna and power supply, are dangerous to small children. They may put the small parts in their nose or mouth and it could cause serious damage to them. **KEEP THIS ACCESS POINT OUT OF THE REACH OF CHILDREN.**
- 6. The Access Point will get heated up when used for a long time (*This is normal and is not a malfunction*). **DO NOT** put this Access Point on paper, cloth, or other flammable materials.



- 7. There's no user-serviceable part inside the Access Point. If you find that the Access Point is not working properly, please contact your dealer of purchase and ask for help. **DO NOT** disassemble the Access Point, warranty will be void.
- 8. If the Access Point falls into water when it's powered, **DO NOT** use your hand to pick it up. Switch the electrical power off before you do anything, or contact an experienced electrical technician for help.
- 9. If you smell something strange or even see some smoke coming out from the Access Point or power supply, remove the power supply or switch the electrical power off immediately, and call the dealer of purchase for help.

1-3 System Requirements

- Computer or network devices with wired or wireless network interface card.
- Web browser (Microsoft Internet Explorer 4.0 or above, Netscape Navigator 4.7 or above, Opera web browser, or Safari web browser).
- An available AC power socket (100 240 V, 50/60Hz)

1-4 Package Contents

Before you start using this PoE Access Point, please check if there's anything missing in the package, and contact your dealer of purchase to claim for missing items:

- DG-WA3000NP Wireless Access Point with PoE
- 3dBi dipole antenna (2 Nos.)
- Switching Power Adapter (5V DC, 1A)
- Rubber feet (4 Nos.)
- Quick Installation Guide
- Installation Guide CD (includes User Manual & Utility)
- Patch cord (1 No.)



1-5 Get familiar with your new wireless PoE Access Point

Front Panel



LED	Light	LED	Description					
Name	Status	Color						
DWD	On	Green	The Access Point is switched on and					
			correctly powered.					
	On	Amber	Wireless WPS mode is enabled.					
WLAN	Off		Wireless network is switched off.					
	Flashing		Wireless LAN activity (transferring or					
			receiving data).					
	LAN port is connected.							
LAN	Off		LAN port is not connected.					
	Flashing		LAN activity (transferring or receiving data).					

1800-209-3444 (Toll Free)
helpdesk@digisol.com
sales@digisol.com
www.digisol.com

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Back Panel



Interfaces	Description
Antennas	Two reverse SMA antenna connectors for screwing
	detachable antennas enclosed with the product.
Power	Power connector, connects to power adapter.
LAN	Local Area Network (LAN) port.
Reset / WPS	Reset the Access Point to factory default settings (clear all settings) or start WPS function. Press this button and hold for 10 seconds to restore all settings to factory defaults, and press this button for less than 5 seconds to start WPS function.



2. System and Network Setup

2-1 Hardware and Software Installation

Please follow the instructions mentioned below to build the network connection between your new wireless PoE Access Point and your computers, network devices:

Hardware Installation:-

- 1. Fix two detachable dipole antennas to the antenna connectors of the Access Point.
- 2. Connect the Access Point to ADSL modem, router, or switch/hub in your network through the LAN port of the Access Point by using Ethernet cable.
- 3. Connect the power adapter (5V DC, 1A) to the wall socket, and then connect the other end of it to the 'Power' socket of the Access Point.
- 4. Please check all LEDs on the front panel. 'PWR' LED should be steadily ON, 'LAN' LED should be ON if the Access Point is correctly connected to the ADSL modem, router or switch/hub. If 'PWR' LED is not ON, or any LED you expected is not ON, please recheck the cabling, or jump to <u>'Section 4-2 Troubleshooting'</u> for possible reasons and solutions.

Note: You must use the power adapter shipped along with the Access Point. DO NOT use any other power adapter from other sources.



Software Installation:-

> Insert the Setup CD into your CD-ROM drive of notebook/desktop computer.



Explore the CD and execute the "APWizard.exe" file. Screen given below will be displayed. Click 'Next' to continue.

Home	Wireless Wi Name Se	ireless Firmware acurity Upgrade	Quick Installation Guide	User Manual Ex	t Digisol.com
8	Welcome to Digis	sol DG-WA3000NP V	Vireless PoE /	Access Point Quick	Install Utility
	This Setup Wizard w	vill guide you through a fe	w steps to config	ure your new Digisol Acce	ess Point.
	You will finish the f A) Connect the Acc B) Configure the op C) Configure the wi D) Save and reboot	following steps with this cess Point to your netwo peration mode of your A ireless settings. t the Access Point.	s wizard: ork. access Point.		
	GISOI	.		Service & Support Toll Free - 1800 209 344 helpdesk@digisol.com	DG-WA3000NP



Connect one end of the network cable to the LAN port on the AP and the other end to one of the LAN ports on the router. Power ON the router and the AP. Ensure that all the LED's on the Access Point are ON. If not, try the above steps again else click 'Next' to continue.





Enter the AP's password to log in to the AP. The default password is "1234". It is recommended to change the AP's password to protect it from being accessed by other users. If you do not wish to change the current password, you can leave "New Password" and "Confirm New Password" fields blank. Click 'Log in' to continue.

Home	Wireless Name	Wireless Security	Firmware Upgrade	Quick Installation Guide	User Manual	Exit	aigisol.com
	Log in to	the AP					
	Enter "1234" to password (123 password, you	o the Current Pa 4) to avoid una can reset it by	assword to log i uthorized acces pressing and h	n to the AP. Plea ss to your networ olding the reset t	se change the defa rk. If you forget the / outton on the AP for	ult login AP's 10 second	ds.
		Current Pase	sword: ****				
		New Pass	sword:				
	Con	firm New Pass	sword:				
					Ba	ck	Log in
	GIS	٦Ľ			Service & S Toll Free - 180(helpdesk@dig	upport) 209 3444 jisol.com	DG-WA3000NP



Configure the IP Address of AP for future management. Click 'Next' to continue.

Home	Wireless Name	Wireless Firm Security Upg	ware rade In:	Quick stallation Guide	User Manua	I Exit	D digisol.com
	Configure	the IP Addres	ss				
	Please assign a AP in the future device from you	a valid IP address to th , you can enter this IP ur local area network.	e AP. If you n address in th	need to confi ne address b	igure more adv ar of the web l	vanced setting: browser to loca	s for the ate this
		IP Address:	192 . 16	8.2.	1		
		Subnet Mask:	255 . 25	5.255.	0		
		Default Gateway:	0 4 0	, 0 ,	0		
	The IP address 192.168.2.1, th "192.168.2". Th existing device:	must match your netw e first 3 numbers of the le last number you can s IP address on your ne	ork settings. AP's IP add assign from atwork.	For example ress should 2 to 254, bu	e: If your route match with you t it must not co	r's IP address ur router, which onflict with othe Back	is h is er Next
	GISC	DĽ			Servic Toll Free helpdesi	e & Support - 1800 209 3444 k@digisol.com	DG-WA3000NP

Select an operation mode for your Access Point and click 'Next'. The wizard will guide you to finish the following corresponding settings.





> Configure the settings for the operation mode you have selected.

Access Point

> Configure the SSID and Channel Number. Click '**Next**' to continue.

Home	Wireless Name	Wireless Security	Firmware Upgrade	Quick Installation Guide	User Manual	Exit	digisol.com
	Configure	e Wireles:	s Setting	S			
	Configure the n "Digisol", the de	ame (SSID) an fault wireless c	d channel for y hannel is 6.	our wireless con	nection. The defaul	It SSID is	
	Wi	reless Name (S	SSID): ^{Digiso} (Exam	ıl ıple: myHome, jo	hn123,)		
		Channel Nu	mber: <mark>6</mark>				
					Вс	ack	Next
	GISC	DĽ			Service & Toll Free - 18 helpdesk@d	Support 00 209 3444 igisol.com	DG-WA3000NP



Universal Repeater

To configure Root AP's SSID Click on '**Site Survey**', a "Wireless Site Survey" window will appear. Select the wireless router or AP you wish to repeat and click '**Connect**'. Next, configure a network name and channel no in Main SSID and Channel Number for the repeater to be identified.

Home	Wireless W Name S	/ireless Firmware ecurity Upgrade	Quick Installation Guide	User Manual Ex	it Digisol.com
	Site Survey				
	Select the Wireless F You can configure the the Repeater mode,	Router or AP you wish e Main SSID for your F you can leave it blank.	to connect or repea Repeater so you car	t by clicking on Site Surve n recognize it. If you are no	y. ot using
		Root AP's SSID:	sol	Site Surve	D
	с	(For hannel Number: <mark>6</mark>	Repeater Mode Or	վչ)	
				Back	Next
	GISO			Service & Support Toll Free - 1800 209 344 helpdesk@digisol.com	DG-WA3000NP



AP Client

Click on '**Site Survey**', "Wireless Site Survey" window will appear. Select the wireless router or AP you wish to connect and click '**Connect**', or enter your wireless network's SSID manually. Click '**Next**' to continue.

Home	Wireless Name	Wireless Security	Firmware Upgrade	Quick Installation Guide	User Manual	Exit	diglsol.com
	Configure	e Wireles:	s Settings	5			
	Configure the n "Digisol".	name (SSID) an	d channel for yc	ur wireless conr	nection. The default S	SID is	
	v	Vireless Name	(SSID): Digisol (Examp	ole: myHome joh	n123)	urvey	
		Channel N	umber: <mark>6</mark>	<u>·</u>			
					Bac	k	Next
	IGIS	٥L			Service & Sup Toll Free - 1800 2 helpdesk@digis	oport 09 3444 ol.com	DG-WA3000NP



Point-to-Point / Point-to-MultiPoint / WDS Bridge

Note: Same setup procedure applies to Point-to-Point Bridge, Point-to-MultiPoint Bridge and WDS Bridge modes.

For bridge mode, you need at least **two** Access Points. We will use Point-to-Point Bridge as an example.

Select a channel number you wish to use and enter the MAC address of the other Access Point for the bridge. Click '**Next**'.

Home Wireless Wireless Firr Name Security Up	nware Quick grade Installation User Guide	r Manual Exit	aligisol.com
Configure Wireless Se	ttings for PtP Bridge	e Mode	
Configure the Channel number you w of the other AP (has to be in Point to F	ish to use for the bridge connection Point Bridge Mode as well.)	on and the MAC add	ress
Channel Number:	6 🔽		
MAC Address:	00:00:00:00:00:00 (Format: XX:XX:XX:XX:XX:XX)		
		Back	Next
JIGISOĽ		Service & Support Toll Free - 1800 209 3444 helpdesk@digisol.com	DG-WA3000NP



Configure the wireless security settings. It is recommended to use WPA2-PSK (AES) which is the most secured encryption for general users.

Then Click 'Next'.

Home	Wireless Wireless Name Security	Firmware Quick Installation User Manual Exit Upgrade Guide digisol.com	
	Configure Wireless	Security	
	Please enter the wireless securi you wish to connect or repeat. Y do not match.	ity key setting that is configured on the wireless router or bridge(s) You will not be able to connect to those devices if the security settings	
	Encryption:	WPA2-PSK(AES)	
	Security key:	*****	
		Please enter 8 to 63 characters	
		Back Next	
	IGISOĽ	Service & Support Toll Free - 1800 209 3444 helpdesk@digisol.com	IP



 \triangleright

Verify the settings you have configured and click 'Restart'.





> This will take 60 Seconds. Then Press 'OK'

Home	Wireless Wireless Name Security	Quick Firmware Quick Installation U Guide	Iser Manual Exit aligisol.com				
	Save Settings and Restart the AP						
	This is the summary of your Digisol Access Point's configuration:						
	IP Address: 192.168.2.1 Operation Mode Wireless Chann MAC Address: 00 Wireless Securit						
	Security Key: 12	surrent solfings and sheat the AB					
Click Restart to save your current settings and reboot the AP.							
	IGISOĽ		Service & Support Toll Free - 1800 209 3444 helpdesk@digisol.com				

> Click 'Finish' to complete the installation.



Congratulations! Your Access Point Installation is now finished.



2-2 Connecting to wireless Access Point using web browser

After the network connection is setup, next step is to setup the Access Point with proper network parameters, so it can work properly in your network environment.

Please use the web browser to configure the Access Point. A computer with wired Ethernet connection to the Access Point is required for this first-time configuration.

Before you start to configure the Access Point, please configure the IP address of the computer in the same network Class as that of the Access Point.

If the operating system of your computer is....

Windows 95/98	- please go to section 2-2-1
Windows 2000	- please go to section 2-2-2
Windows XP	- please go to section 2-2-3
Windows Vista	- please go to section 2-2-4



2-2-1 Windows 95/98 IP address setup

1. Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Double-click '*Network*' icon, and *Network* window will appear. Select 'TCP/IP', then click '**Properties**'.

Network ? 🗙					
Configuration Identification Access Control					
The following <u>n</u> etwork components are installed:					
📇 Client for Microsoft Networks					
🔜 Client for NetWare Networks					
SMC EtherPower Adapter (SMC8432)					
TIPX/SPX-compatible Protocol					
ТСРЛР					
Add <u>R</u> emove <u>P</u> roperties					
Primary Network Logon:					
Client for Microsoft Networks					
<u>File and Print Sharing</u>					
Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks.					
OK Cancel					



2. Select 'Specify an IP address', then input the following settings in respective field:

IP address: 192.168.2.2 Subnet Mask: 255.255.255.0

Click 'OK' when finish.

TCP/IP Propertie	2	? ×			
Bindings Gateway	Advanced WINS Configuration	DNS Configuration			
An IP address can be automatically assigned to this computer by a DHCP server. If your network does not have a DHCP server, ask your network administrator for an address, and then type it in the space below.					
)K Cancel			



2-2-2 Windows 2000 IP address setup

Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Double-click '*Network and Dial-up Connections*' icon, Right click on '*Local Area Connection*' and select '*Properties*', *Local Area Connection Properties* window will appear. Select 'Internet Protocol (TCP/IP)', then click '**Properties**'

Local Area Connection Properties					
General					
Connect using:					
💷 Realtek RTL8029(AS) PCI Ethernet Adapter					
Configure					
Components checked are used by this connection:					
Install Uninstall Properties					
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.					
OK Cancel					





2. Select 'Use the following IP address', then input the following settings in respective field:

IP address: 192.168.2.2 Subnet Mask: 255.255.255.0 Default gateway: 192.168.2.1

Click 'OK' when finish.

You can get IP settings assigne this capability. Otherwise, you r the appropriate IP settings.	ed automatically if your network supports need to ask your network administrator fo
O Obtain an IP address auto	omatically
• Use the following IP addr	8\$\$: ~
IP address:	192.168.2.2
Sybnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.2.1
C Obtain DNS server addre	ss automatically
• Use the following DNS se	rver addresses:
Preferred DNS server:	
Alternate DNS server:	4



2-2-3 Windows XP IP address setup

Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Click on '*Network Connections*', Right click on '*Local Area Connection*' and select *Properties, Local Area Connection Properties* window will appear. Select 'Internet Protocol (TCP/IP)' and then click 'Properties'.

🕹 Local Area Connection Properties 🛛 🔹 💽					
General Authentication Advanced					
Connect using:					
AMD PCNET Family PCI Ethernet Ad					
This connection uses the following items:					
 Client for Microsoft Networks File and Printer Sharing for Microsoft Networks 					
Internet Protocol (TCP/IP)					
Install Uninstall Properties					
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.					
Show icon in notification area when connected Notify me when this connection has limited or no connectivity					
OK Cancel					



2. Select 'Use the following IP address', then input the following settings in respective field:

IP address: 192.168.2.2 Subnet Mask: 255.255.255.0 Default gateway: 192.168.2.1

Click 'OK' when finish.

eneral				
'ou can get IP settings assigne his capability. Otherwise, you n he appropriate IP settings.	d automatically if your network supports eed to ask your network administrator for			
Obtain an IP address automatically				
Use the following IP addre	\$\$.			
IP address:	192.168.2.2			
S <u>u</u> bnet mask:	255 . 255 . 255 . 0			
Default gateway:	192.168.2.1			
Default gateway:	192 . 168 . 2 . 1			
Default gateway: Obtain DNS server addres OUse the following DNS ser	192 . 168 . 2 . 1 s automatically ver addresses:			
 Default gateway: ○ Dbtain DNS server addres ○ Use the following DNS ser Preferred DNS server: 	192.168.2.1 s automatically ver addresses:			
Default gateway: ○ Obtain DNS server addres ○ Use the following DNS ser Preferred DNS server: Alternate DNS server:	192.168.2.1 s automatically ver addresses:			



2-2-4 Windows Vista IP address setup

Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Click on '*View Network Status and Tasks*', and then click on '*Manage Network Connections*'. Right-click '*Local Area Connection*', then select '*Properties*'. *Local Area Connection Properties* window will appear, select 'Internet Protocol Version 4 (TCP / IPv4), and then click '**Properties**'

🕌 Local Area Connection Properties 📃 🗙				
Networking				
Connect using:				
Intel(R) PRO/1000 MT Network Connection				
Configure				
This connection uses the following items:				
 Client for Microsoft Networks QoS Packet Scheduler File and Printer Sharing for Microsoft Networks File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 9 (TCP/IPv4) Internet Proto				
Install Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.				
OK Cancel				



2. Select 'Use the following IP address', then input the following settings in respective field:

IP address: 192.168.2.2 Subnet Mask: 255.255.255.0 Default gateway: 192.168.2.1

Click 'OK' when finish.

General	
You can get IP settings assigne this capability. Otherwise, you for the appropriate IP settings.	d automatically if your network supports need to ask your network administrator
💮 Obtain an IP address auto	matically
• Use the following IP addre	ISS:
IP address:	192.168.2.2
Subnet mask:	255.255.255.0
Default gateway:	192.168.2.1
Obtain DNS server addres	s automatically
O Use the following DNS ser	ver addresses:
Preferred DNS server:	· · · · · · · · · · · · · · · · · · ·
Alternate DNS server:	Grab select d Region
	Advanced



2-2-5 Connecting to Web Management Interface by web browser

All functions and settings of this Access Point must be configured via web management interface. Please start your web browser, and input '192.168.2.1' in address bar, then press 'Enter' key. The following message should be shown:

Connect to 192.168.2	.1 🦳 🔀
	GA
Default: admin/1234	
User name:	
Password:	
	emember my password
	OK Cancel



Please input user name and password in the field respectively, default user name is '**admin**', and default password is '**1234**', then press 'OK' button, and you can see the web management interface of this Access Point:

JIGISOL	DC	G-WA3000NP	Wireless Access Point with PoE
Home	Status and Information		~
Basic Settings	Below mentioned information can I	be used to monitor the Access Point's MAC address, ru	ntime code and hardware version.
WPS Setting			
Advanced Settings	System	DG-WA3000NP 300Mbps Access Point with PoE	
Security	Uptime	0day:0h:0m:32s	
Radius Server	Hardware Version	Rev. A	≣
MAC Filtering	Runtime Code Version	1.00	
System Utility	Wireless Configuration Mode	AP	
Configuration Tool	ESSID	Digisol	
Ungrade	Channel Number	11	
Opgrade	Security	Disable	
Reset	BSSID	80:1f:02:1a:05:08	
	Associated Clients	0	
	LAN Configuration		
	IP Address	192,168,2,1	~

NOTE: If you can't see the web management interface, and you're being prompted to input user name and password again, it means you didn't input username and password correctly. Please retype user name and password again. If you're certain about the user name and password you typed, please go to <u>'Section 4-2 Troubleshooting'</u> to perform a factory reset, to set the password back to default value.



2-3 View System Status and Information

After you are connected to the Access Point by web browser, the first thing you see is 'Status and Information' page. All system and network related information of this Access Point will be displayed here. The information is very helpful when you want to know the detailed information of your Access Point, and when you try to fix the communication problem between this Access Point and other wired / wireless computer / devices.

You can click '**Home**' on the left, and the system status and Information will be displayed, as shown below:

JIGISOL	. Do	G-WA3000NP	Wireless Access Point with PoE
Home Basic Settings	Status and Information Below mentioned information can	be used to monitor the Access Point's MAC address, ru	ntime code and hardware version.
WPS Setting	System		
Advanced Settings	Model	DG-WA3000NP 300Mbps Access Point with PoE	
Security	Uptime	0day:0h:0m:32s	
Radius Server	Hardware Version	Rev. A	
MAC Filtering	Runtime Code Version Wireless Configuration	1.00	
System Utility	Mode	AP	
Configuration Tool	ESSID	Digisol	
Ungrada	Channel Number	11	
Opgrade	Security	Disable	
Reset	BSSID	80:1f:02:1a:05:08	
	Associated Clients	0	
	LAN Configuration		
	IP Address	192,168,2,1	×



The following screen shows all the parameters of Status Information.

Status and Information	1
Below mentioned information can	be used to monitor the Access Point's MAC address, runtime code and hardware version
System	
Model	DG-WA3000NP 300Mbps Access Point with PoE
Uptime	Oday:0h:7m:19s
Hardware Version	Rev. A
Runtime Code Version	1.00
Wireless Configuration	
Mode	AP
ESSID	Digisol
Channel Number	11
Security	Disable
BSSID	80:1f:02:1a:05:08
Associated Clients	0
LAN Configuration	
IP Address	192.168.2.1
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
MAC Address	80:1f:02:1a:05:08

Parameter	Description	
Model	Describes the model number of the unit.	
Up time	Displays the total passed time since the wireless Access	
	Point is powered.	
Hardware Version	Displays hardware version. This information is helpful	
	when you need online help from the dealer of purchase.	
Runtime Code	Displays current firmware version. If you want to	
Version	perform firmware upgrade, this number will help you to	
	determine if you need such upgrade.	
Mode	Displays current wireless operating mode	
ESSID	Displays the current wireless SSID. Default is "Digisol"	
Channel	Displays current wireless channel number	
Number		



Security	Displays current wireless security setting	
BSSID	Displays current BSSID (unique identification name of	
	this Access Point, it can not be modified by user)	
Associated Clients	Displays the number of connected wireless clients	
IP Address	Displays the IP address of this wireless Access Point	
Subnet Mask	Displays the net mask of IP address	
Default Gateway	Displays the IP address of the default gateway	
MAC address	Displays the MAC address of LAN interface	

2-4 Select an Operating Mode for Wireless Access Point

This Access Point can be operated in different modes; you can click '**Basic Setting**' on the left of web management interface to select an operating mode you want to meet for different needs:

	JIGISOĽ	DG-WA3000NP	Wireless Access Point with PoE
** *** *	Home Basic Settings WPS Setting Advanced Settings Security Radius Server MAC Filtering System Utility Configuration Tool Upgrade Reset Advanced Set	Basic Settings This page allows you to define ESSID and Channel Number for the wireless connection. The wireless stations to connect to the Access Point. Mode : AP Band : 2.4 GHz (B+G+N) MAIN ESSID : Digisol Multiple ESSID Channel Number : 11 Associated Clients : Show Active Clients	Apply Cancel

You can click '**Mode**' dropdown menu to select operating mode, and there are 6 operating modes available:



Below are the descriptions of different modes supported by Access Point.

Modes	Description		
AP	Access Point mode, allows wireless clients to		
	connect to Access Point and exchange data with		
	the devices connected to the wired network.		
Station-	Enables the Ethernet devices such us TV and Game		
Infrastructure	player connected to the Access Point to a wireless		
	client.		
AP Bridge-Point to	Establishes wireless connection with another		
Point	wireless Access Point using the same mode. It		
	links the wired network which these two wireless		
	Access Points are connected to. Only one Access		
	Point can be connected in this mode.		
AP Bridge-Point to	Establishes wireless connection with other wireless		
Multi-Point	Access Points using the same mode. It links the		
	wired network which these wireless Access Points		
	are connected to. Up to four Access Points can be		
	connected in this mode.		
AP Bridge-WDS	This mode is similar to 'AP Bridge to Multi-Point',		
	but the Access Point does not work only in a		
	bridge-dedicated mode, but also will be able to		
	accept wireless clients while the Access Point is		
	working as a wireless bridge.		
Universal Repeater	This product can act as a wireless range extender		
	that will help you to extend the wireless network.		
	The Access Point can act as Station and AP at the		
	same time. It can use Station function to connect to		
	a Root AP and use AP function to service all		
	wireless clients within its coverage.		

Please select one wireless operating mode. For detailed descriptions of every operating mode; please refer to <u>Section 2-4-1</u> to <u>2-4-6</u> listed below.


2-4-1 AP Mode

This is the most common mode. When in AP mode, this Access Point acts as a bridge between 802.11b/g/n wireless devices and wired Ethernet network, and exchange data between them. When you select 'AP', the following options will be displayed:

Basic Settings	
This page allows you to define ESSID and Channel Numb Point.	er for the wireless connection. These parameters are used for the wireless stations to connect to the Access
Mode : AP	
Band : 2.4 GHz (B+G+N)	
MAIN ESSID : Digisol	Multiple ESSID
Channel Number : 11 💌	
Associated Clients : Show Active Cl	lients
	Apply Cancel

Parameter	Description		
Band	Please select the wireless band you wish to use. By		
	selecting different band setting, you'll be able to allow or		
	deny the wireless client of a certain band.		
	If you select 2.4GHz (B), 2.4GHz (N), or 2.4GHz (G), only wireless clients using the wireless band you select (802.11b, 802.11n, or 802.11g) will be able to connect to this Access Point.		
	If you select 2.4GHz (B+G), then only wireless clients using 802.11b and 802.11g band will be able to connect to this Access Point.		
	If you want to allow 802.11b, 802.11g, and 802.11n clients to connect to this Access Point, select 2.4GHz $(B+G+N)$.		
Main ESSID	Please input the ESSID (the name used to identify this wireless Access Point) here. You can input up to 32		



	alphanumerical characters. PLEASE NOTE THAT		
	ESSID IS CASE SENSITIVE.		
Multiple ESSID	The Access Point supports multiple SSID function; up to		
	four SSIDs can be set. If you want to configure additional		
	SSIDs, please click this button. For detailed description		
	of the function, please refer to <u>Section 2-4-1-1</u> .		
Channel	Please select a channel number you wish to use. If you		
Number	know a certain channel number is being used by other		
	wireless Access Points nearby, please refrain from using		
	the same channel number		
Associated Clients	Click 'Show Active Clients' button and a new popup		
	window will appear which contains the information about		
	all wireless clients connected to this Access Point. You		
	can click 'Refresh' button in popup window to keep		
	information up-to-date.		

ouro ootting	o ou o o o o o o o o o o o o o o o o o
You may press CO make the changes	NTINUE button to continue configuring other settings or press APPLY button to restart the system to ake effect.
CONTINUE	APPLY



2-4-1-1 Multiple ESSID

This Access Point supports four SSIDs. Except the main SSID (It can be configured in Basic Setting page), you can configure another three of SSIDs here. With different SSIDs, you can separate the wireless networks with different SSID name, wireless security, WMM, and VLAN settings.

NOTE: If you want to configure the wireless security for different SSID, please go to section '2-7 Wireless Security' for more information.

<i>🌔</i> Multip	le SSID Se	ettings - '	Windows Intern	et Explorer			_ 🗆 ×
🤌 http:/,	192.168.2	.1/mssid.a	sp				
	Multiple ESSID						
	This page	allows y	ou to configure	the wireless setti	ngs for Multip	le ESSIDs. The	
	WIICICSS 3	ecunty s	settings for thes		connigured in	Decumy page.	
	Basic Setting Advanced Setting						
	No.	Enable	SSID	Broadcast SSID	WMM	VLAN ID (0: Untagged)	
	ESSID1	V		Enable 💌	Disable 💌	0	
	ESSID2			Enable 💌	Disable 💌	0	
	ESSID3			Enable 💌	Disable 💌	0	
				(Apply	Cancel)
					internet	🦓 🕶 🔍 10	00% • //



Parameter	Description
No.	Except Main SSID, you can configure additional three
	ESSID here.
Enable	Select the box to enable the different additional ESSID.
SSID	Please input the SSID name (the name used to identify
	this wireless Access Point) here. You can input up to 32
	alphanumerical characters. PLEASE NOTE THAT
	ESSID IS CASE SENSITIVE.
Broadcast SSID	Decides if the wireless Access Point will broadcast its
	own ESSID or not. You can hide the ESSID of your
	wireless Access Point (set the option to 'Disable'), so
	only those people who know the ESSID of your wireless
	Access Point can get connected.
WMM	WMM (Wi-Fi Multimedia) technology, which can
	improve the performance of certain network
	applications, like audio/video streaming, network
	telephony (VoIP), and others. When you enable WMM
	function, the Access Point will define the priority of
	different kinds of data, to give higher priority to
	applications which require instant responding. Therefore
	you can improve the performance of such network
	applications.
VLAN ID	If your network uses VLANs, you can assign the SSID
(0:Untagged)	to a VLAN on your network. Client devices that are
	associated using the SSID are grouped into this VLAN.
	The VLAN ID range is from 1 to 4094. The VLAN ID is
	0 by default, it means that disable the VLAN function
	for the ESSID.



2-4-2 Station-Infrastructure

In this mode, you can connect the Access Point to Ethernet devices such as TV and Game player to enable the Ethernet device to act as a wireless station and connect to a wireless network through an Access Point or AP router.

Basic Settings
This page allows you to define ESSID and Channel Number for the wireless connection. These parameters are used for the wireless stations to connect to the Access Point.
Mode : Station-Infrastructure
Band : 2.4 GHz (B+G+N) 🗸
MAIN ESSID : Digisol
Site Survey : Select Site Survey
Apply Cancel

Parameter	Description
Band	Please select the wireless band you wish to use. By selecting different band settings, you'll be able to allow or deny the wireless client of a certain band.
	If you select 2.4GHz (B), 2.4GHz (N), or 2.4GHz (G), only wireless clients using the wireless band you select (802.11b, 802.11n or 802.11g) will be able to connect to this Access Point.
	If you select 2.4GHz (B+G), then only wireless clients using 802.11b and 802.11g bands will be able to connect to this Access Point.
	If you want to allow 802.11b, 802.11g, and 802.11n clients to connect to this Access Point, select 2.4GHz (B+G+N).
Main ESSID	Please input the ESSID (the name used to identify this wireless Access Point) here. You can input up to 32 alphanumerical characters. PLEASE NOTE THAT ESSID IS CASE SENSITIVE.



Site Survey	When you use this Access Point as a wireless station
	for Ethernet network device to have wireless capability,
	you have to associate it with a working Access Point.
	Click 'Select Site Survey' button, then a "Wireless Site
	Survey Table" will pop up. It will list all available
	Access Points near by. You can select one Access Point
	in the table and it will join wireless LAN through this
	Access Point. Please go to Section 2-4-2-1 for more
	information about the 'Wireless Site Survey Table'.

Save setting	s successfully!
You may press CO make the changes ⁻	NTINUE button to continue configuring other settings or press APPLY button to restart the system to sake effect.
CONTINUE	APPLY



2-4-2-1 Wireless Site Survey

The table will list the Access Points nearby, as the Access Point is set to Station mode; you can select one of the Access Points to associate.

Wireless Site	e Survey					
This page provides found, you can sele	tool to scan the act the network a	wireless networ and connect to it	ks. When de t manually.	sired Access P	oint or I	IBSS is
Select Cha	innel SSID	BSSID	Encryption	Authentication	Signa	Mode
0	1 dlink 00:1	B:11:B0:63:A6	NONE	OPEN	55	11b/g
Refresh	Connect					

Parameter	Description
Select	Click the radio button to select the Access Point.
Channel	Displays the channel number of the Access Point.
SSID	Displays the SSID name of the Access Point.
BSSID	Displays the BSSID (MAC Address) of the Access
	Point.
Encryption	Displays the encryption setting of the Access Points. If
	you have selected the Access Point with security setting,
	you have to go to section '2-7 Wireless Security' to set
	the same security with the Access Point you want to
	associate.
Authentication	Displays the authentication type of the Access Point.
Signal	The signal strength of each Access Point will be
	displayed here. Stronger the signal strength, better is the
	connection quality.
Mode	Displays the wireless modes which include 11b, 11b/g or
	11b/g/n or 11n only.
Refresh	Click this button to refresh the table.
Connect	Select an Access Point and click this button to choose
	the network. The SSID name of the Access Point you
	have selected will be displayed in the Main SSID in the
	Basic Setting page.



2-4-3 AP Bridge-Point to Point Mode

In this mode, this wireless Access Point will connect to another wireless Access Point which uses the same mode, and all wired Ethernet clients of both wireless Access Points will be connected together. You can use this mode to connect a network to another network which is physically isolated.

Please note that when you set your Access Point to this mode, it will not accept regular wireless clients anymore.

When you select 'AP Bridge-Point to Point', the following options will be displayed:

Basic Settings	
This page allows you to define ESSID and Channel Number for the wireless connection. Point.	These parameters are used for the wireless stations to connect to the Access
Mode : AP Bridge-Point to Point 💌	
Band : 2.4 GHz (B+G+N) 🔽	
Channel Number : 11 💌	
MAC address 1 : 00000000000	
Set Security : Set Security	
	Apply Cancel

Parameter	Description
Band	Please select the wireless band you wish to use. By selecting
	different band settings, you'll be able to allow or deny the
	wireless client of a certain band.
	If you select 2.4GHz (B), 2.4GHz (N), or 2.4GHz (G), only wireless clients using the wireless band you select (802.11b, 802.11n or 802.11g) will be able to connect to this Access Point.
	If you select 2.4GHz (B+G), then only wireless clients using
	802.11b and 802.11g band will be able to connect to this
	Access Point.



	If you want to allow 802.11b, 802.11g, and 802.11n clients
	to connect to this Access Point, select 2.4GHz (B+G+N).
Channel	Please select a channel number you wish to use. This channel
Number	number must be same as the other wireless Access Point you
	wish to connect.
MAC address 1	Please input the MAC address of the wireless Access Point
	you wish to connect.
Set Security	Click this button to select an encryption mode for this
	wireless link, a new popup window will appear, as shown
	below. For detailed description of encryption modes please
	refer to <u>Section 2-7</u>
	5 Security Settings - Windows Internet Explorer
	0://192.168.2.1/wlwdsenp4.asp
	WDS Security Setting
	This page allows you setup the WDS security. The value depends on your AP Security settings.
	Encryption : Disabled 💌
	Apply Reset

Save settings successfully!
You may press CONTINUE button to continue configuring other settings or press APPLY button to restart the system to
make the changes take effect.
CONTINUE APPLY



2-4-4 AP Bridge-Point to Multi-Point Mode

In this mode, this wireless Access Point will connect up to four wireless Access Points which use the same mode, and all wired Ethernet clients of every wireless Access Point will be connected together. You can use this mode to connect a network to other networks which are physically isolated.

Please note that when you set your Access Point to this mode, it will not accept regular wireless clients anymore.

When you select 'AP Bridge-Point to Multi-Point', the following options will be displayed:

Basic Settings	
This page allows you to define ESSIE Point.	and Channel Number for the wireless connection. These parameters are used for the wireless stations to connect to the Access
Mode :	AP Bridge-Point to Multi-Point
Band :	2.4 GHz (B+G+N)
Channel Number :	11 💌
MAC address 1 :	0000000000
MAC address 2 :	0000000000
MAC address 3 :	0000000000
MAC address 4 :	0000000000
Set Security :	Set Security
	Apply Cancel

Parameter	Description
Band	 Please select the wireless band you wish to use. By selecting different band settings, you'll be able to allow or deny the wireless client of a certain band. If you select 2.4GHz (B), 2.4GHz (N), or 2.4GHz (G), only wireless clients using the wireless band you select (802.11b, 802.11n, or 802.11g) will be able to connect to this Access Point.



	If you select 2.4GHz (B+G), then only wireless clients using
	802.11b and 802.11g band will be able to connect to this
	Access Point.
	If you want to allow 802.11b, 802.11g, and 802.11n clients to
	connect to this Access Point, select 2.4GHz (B+G+N).
Channel	Please select a channel number you wish to use. This channel
Number	number must be same as the other wireless Access Point you
	wish to connect.
MAC	Please input the MAC address of the wireless Access Point
address 1-4	you wish to connect.
Set Security	Click this button to select an encryption mode for this
	wireless link, a new popup window will appear, as shown
	below. For detail description of encryption modes please refer
	to <u>Section 2-7.</u>
	5 Security Settings - Windows Internet Explorer
	b://192.168.2.1/wlwdsenp4.asp
	WDS Security Setting
	This page allows you setup the WDS security. The value depends on your AP Security
	setungs.
	Encryption : Disabled
	Apply Reset

Save settin	gs successfully!
You may press C(make the change:	ONTINUE button to continue configuring other settings or press APPLY button to restart the system to s take effect.
CONTINUE	APPLY



2-4-5 AP Bridge-WDS Mode

In this mode, this wireless Access Point will connect to up to four wireless Access Points which use the same mode, and all wired Ethernet clients of every wireless Access Point will be connected together. You can use this mode to connect a network to other networks which are physically isolated.

When you use this mode, this Access Point is still able to accept wireless clients. When you select 'AP Bridge-WDS', the following options will be displayed:

Basic Settings	
This page allows you to define ESSI Point.	O and Channel Number for the wireless connection. These parameters are used for the wireless stations to connect to the Access
Mode :	AP Bridge-WDS
Band :	2.4 GHz (B+G+N) 💌
MAIN ESSID :	Digisol Multiple ESSID
Channel Number :	11 💌
Associated Clients :	Show Active Clients
MAC address 1 :	0000000000
MAC address 2 :	0000000000
MAC address 3 :	0000000000
MAC address 4 :	0000000000
Set Security :	Set Security
	Apply Cancel

Parameter	Description
Band	Please select the wireless band you wish to use. By selecting different band settings, you'll be able to allow or deny the wireless client of a certain band.
	If you select 2.4GHz (B), 2.4GHz (N), or 2.4GHz (G), only wireless clients using the wireless band you select (802.11b, 802.11n or 802.11g) will be able to connect to this Access Point.



	If you select 2.4GHz (B+G), then only wireless clients using
	Access Point.
	If you want to allow 802.11b, 802.11g, and 802.11n clients to connect to this Access Point, select 2.4GHz (B+G+N).
MAIN ESSID	Please input the ESSID (the name used to identify this wireless Access Point) here. You can input up to 32
	alphanumerical characters. PLEASE NOTE THAT ESSID IS CASE SENSITIVE.
Multiple	The Access Point supports multiple SSID function; up to
ESSID	four SSIDs can be set. If you want to configure additional
	SSIDs, please click this button. For detailed descriptions of
	the function, please refer to <u>Section 2-4-1-1</u> .
Channel	Please select a channel number you wish to use. The channel
Number	number must be same as the other wireless Access Point you wish to connect
Associated	Visit to connect.
Clients	will appear which contains the information about all wireless
Chents	clients connected to this Access Point, as shown below. You
	can click 'Refresh' button in popup window to keep
	information up-to-date.
	Active Wireless Client Table
	Following table lists the active wireless clients connected to the Access Point.
	AID MAC Address 802.11 PhyMode Power Save Bandwidth
	1 00:1f:1f:52:ba:8b HTMIX OFF 40M
	Refresh Close
MAC	Please input the MAC address of the wireless Access Point
address 1-4	vou wish to connect.



Set Security	Click this button to select an encryption mode for this wireless link, a new popup window will appear, as shown below. For detailed description of encryption modes please refer to Section 2-7 WDS Security Setting This page allows you setup the WDS security. The value depends on your AP Security settings. Encryption : Disabled
	Apply Reset

Save settin	js successfully!	
You may press C make the changes	INTINUE button to continue configuring other settings or press APPLY button to restart the take effect.	system to
CONTINUE	APPLY	



2-4-6 Universal Repeater

In this mode, the Access Point can act as a wireless repeater; it can be Station and AP at the same time. It can use Station function to connect to a Root AP and use AP function to service all wireless stations within its coverage.

NOTE: For Repeater Mode, this Access Point will demodulate the received signal and check if the signal is noise or valid data for the operating network. Once the Access Point validates the signal, then it will modulate and amplify the signal again.

Basic Settings					
Paolo Coulingo					
This page allows you to define ESSID) and Channel Number for the	wireless connection. T	hese parameters are used for the wirele	ess stations to conne	ct to the Access
Point.					
Mode :	Universal Repeater	~			
Band :	2.4 GHz (B+G+N) 💌				
MAIN ESSID :	Digisol	Multiple ESSID			
Channel Number :	11 💌				
Associated Clients :	Show Active Clients)			
Root AP SSID :					
Select Site Survey	Select Site Survey				
				Apply	Cancel

Parameter	Description
Band	Please select the wireless band you wish to use. By selecting different band settings, you'll be able to allow or deny the wireless client of a certain band.
	wireless clients using the wireless band you select (802.11b, 802.11n or 802.11g) will be able to connect to this Access Point.



	If you select 2.4GHz (B+G), then only wireless clients using 802.11b and 802.11g band will be able to connect to this Access Point. If you want to allow 802.11b, 802.11g, and 802.11n clients to connect to this Access Point, select 2.4GHz (B+G+N).
MAIN ESSID	Please input the ESSID (the name used to identify this wireless Access Point) here. You can input up to 32 alphanumerical characters. PLEASE NOTE THAT ESSID IS CASE SENSITIVE.
Multiple ESSID	The Access Point supports multiple SSID function; up to four SSIDs can be set. If you want to configure additional SSIDs, please click this button. For detailed description of the function, please refer to <u>Section 2-4-1-1</u> .
Channel Number	Please select a channel number you wish to use. The channel number must be same as the other wireless Access Points you wish to connect.
Associated Clients	Click 'Show Active Clients' button and a new popup window will appear which contains the information about all wireless clients connected to this Access Point. You can click 'Refresh' button in popup window to keep information up-to-date.
	Active Wireless Client Table Following table lists the active wireless clients connected to the Access Point.
	AID MAC Address 802.11 PhyMode Power Save Bandwidth 1 fc:c7:34:36:cb:48 HTMIX ON 20M
Root AP SSID	In 'Universal Repeater' mode, this device can act as a station to connect to a Root AP. You should assign the SSID of the Root AP here or click 'Select Site Survey' button to choose a Root AP.



Select Site	Click 'Select Site Survey' button, then a "Wireless Site
Survey	Survey Table" will pop up. It will list all available Access
	Points near by. You can select one Access Point in the table
	and the Access Point will join wireless LAN through this
	Access Point. Please go to Section 2-4-2-1 for more
	information about the 'Wireless Site Survey Table'.

Save settin	js successfully!
You may press C(make the changes	NTINUE button to continue configuring other settings or press APPLY button to restart the system to take effect.
CONTINUE	APPLY



2-5 WPS Setting

Wi-Fi Protected Setup (WPS) is the simplest way to build a connection between wireless network clients and this Access Point. You need not select encryption mode and input a long encryption passphrase every time you need to setup a wireless client. You only have to press a button on wireless client and this Access Point, and the WPS will do the setup for you.

This Access Point supports two types of WPS: Push-Button Configuration (PBC), and PIN code. If you want to use PBC, you have to switch this Access Point to WPS mode and push a specific button (hard/soft push button) on the wireless client to start WPS mode. You can push Reset/WPS button of this Access Point, or click 'Start PBC' button in the web configuration interface to do this. Press WPS button on wireless client (hard/soft push button) within 2 minutes to establish a secured wireless connection.

If you want to use PIN code, you have to provide the PIN code of the wireless client you wish to connect to this Access Point and then switch the wireless client to WPS mode. The detailed instructions are listed below:

Note: WPS function of this Access Point will not work for those wireless clients which do not support WPS.



To use WPS function to set encrypted connection between this Access Point and WPS-enabled wireless client by WPS, click 'WPS Setting' on the left of web management menu, and the following information will be displayed.

	JIGISO	DG-WA3000NP	Wireless Access Point with PoE
	Home	WPS(Wi-Fi Protected Setup) Settings	
r	Basic Settings WPS Setting	This page allows you to change the setting for WPS(Wi-Fi Protected Setup).WPS can help automatically connect to the Access Point.	your wireless client
	Advanced Settings Security	Wi-Fi Protected Setup Information WPS Status: unConfigured	
	Radius Server	Self PinCode: 17052245 SSID: Digisol	
	MAC Filtering	Authentication Mode: Disable	
	System Utility	Passphrase Key:	
	Configuration Tool	Device Configure	
	Upgrade	Configure via Push Button: Start PBC	
	Reset	Configure via Client PinCode: Start PIN	

Parameter	Description
Enable WPS	Check this box to enable or disable WPS function. By
	default check box is enabled.
Wi-Fi Protected Setup Information	All information related to WPS will be displayed here, they're helpful when you're setting up connections by WPS.WPS Status: Displays WPS status. If data encryption settings of this Access Point has never been set,
	 encryption settings have been set before, 'Configured' message will be displayed here. Self PinCode: This is the WPS PIN code of this Access Point. This code is useful when you need to build wireless connection by WPS with other WPS-enabled wireless devices. SSID: Displays the SSID (ESSID) of this Access Point.



	Authentication Mode: The wireless security authentication mode of this Access Point will be displayed here. If you don't enable security function of the Access Point before WPS is activated, the Access Point will auto set the security to WPA (AES) and generate a set of passphrase key for WPS connection.
	<i>Passphrase Key:</i> Displays the WPA passphrase here, all characters will be replaced by asterisk for security reason. If encryption is not set on this Access Point, nothing will be displayed here.
Config Mode	There are 'Registrar' and 'Enrollee' modes for the WPS connection. When 'Registrar' is enabled, the wireless clients will follow the Access Point's wireless settings for WPS connection. When 'Enrollee' mode is enabled, the Access Point will follow the wireless settings of wireless client for WPS connection.
Start PBC	Click 'Start PBC' to start Push-Button style WPS setup procedure. This Access Point will wait for WPS requests from wireless clients for 2 minutes. The 'WLAN' LED on the Access Point will be steady on for 2 minutes when this Access Point is waiting for incoming WPS request.
Start PIN	Please input the PIN code of the wireless client you wish to connect, and click 'Start PIN' button. The 'WLAN' LED on the Access Point will be steady on, when this Access Point is waiting for incoming WPS request.

NOTE: When you're using PBC type WPS setup, you must press 'PBC' button (hardware or software) of wireless client within 120 seconds. If you didn't press PBC button of wireless client within this time period, please press 'PBC' button (hardware or software) of this Access Point again.



2-6 Advanced Wireless Settings

This wireless Access Point has many advanced wireless features. Please note that all settings listed here are for experienced users only, if you're not sure about the meaning and function of these settings, please don't modify them, or the wireless performance will be reduced.

You can click 'Advanced Setting' on the left to enter advanced settings menu, and the following message will be displayed:



Parameter	Description
Fragment	Set the Fragment threshold of wireless radio. Do not modify
Threshold	default value if you don't know what it is, default value is
	2346
RTS Threshold	Set the RTS threshold of wireless radio. Do not modify
	default value if you don't know what it is, default value is
	2347
Beacon Interval	Set the beacon interval of wireless radio. Do not modify
	default value if you don't know what it is, default value is
	100



DTIM Period	Set the DTIM period of wireless radio. Do not modify default value if you don't know what it is default value is 3
Data Data	Set the wireless date transfer rate to a certain value Since
Dala Kale	Set the whereas data transfer fate to a certain value. Since
	most of the wireless devices will negotiate with each other
	and pick a proper data transfer rate automatically, it's not
	necessary to change this value unless you know what will
	happen after modification.
N Data Rate	Set the data rate of 802.11n clients, available options are
	MCS 0 to MCS7, it's safe to set this option to 'Auto' and
	it's not necessary to change this value unless you know
	what will happen after modification.
Channel Width	Select wireless channel width (bandwidth taken by wireless
	signals of this Access Point). It is suggested to select 'Auto
	20/40MHz'. Do not change to '20 MHz' unless you know
	what it is.
Preamble Type	Set the type of preamble of wireless radio. Do not modify
	default value if you don't know what it is, default setting is
	'Short Preamble'.
Broadcast ESSID	Decides if the wireless Access Point will broadcast its own
	ESSID or not. You can hide the ESSID of your wireless
	Access Point (set the option to 'Disable'), so only people
	who know the ESSID of your wireless Access Point can get
	connected.
WMM	WMM (Wi-Fi Multimedia) technology, which can improve
	the performance of certain network applications, like
	audio/video streaming, network telephony (VoIP), and
	others. When you enable WMM function, the Access Point
	will define the priority of different kinds of data, to give
	higher priority to applications which require instant
	responding Therefore you can improve the performance of
	such network applications.
CTS Protect	Enabling this setting will reduce the chance of radio signal
	collisions between 802 11b and 802 11g wireless Access
	Points It is recommended to set this option to 'Auto'
TY Power	You can set the output power of wireless radio. This value
IXIOwci	can be set to less than 100% if your wireless coverage area
	is small. This will enhance security (malicious / unknown
	users in distance will not be able to reach your wireless
	A cooss Doint)



	-
(ou may press C	DNTINUE button to continue configuring other settings or press APPLY button to restart the system to
hake the changes	take effect.



2-7 Wireless Security

This wireless Access Point provides many types of wireless security (wireless data encryption). When you use data encryption, data transferred by radio signals in the air will become unreadable for those people who don't know correct encryption key (encryption password).

Please remember it's very important to set wireless security settings properly! Without a proper setting, hackers and intruders may gain access to your local network and interfere with your computers and servers, which could cause serious problem.

There are two ways to set wireless security:

A. Basic Settings:

1. Click 'Basic Settings' on the left of web management interface.

JIGISOL		DG-WA3000NP	Wireless Access Point with PoE
Home	Basic Settings This page allows you to define ESSII Point.	D and Channel Number for the wireless connection. These parameters are used for the wire	less stations to connect to the Access
WPS Setting Advanced Settings	Mode : Band :	AP 2.4 GHz (B+G+N)	
Radius Server	MAIN ESSID : Channel Number : Associated Clients :	Digisol Multiple ESSID	
System Utility			
Configuration Tool Upgrade			Apply Cancel
Reset			



2. Click 'Set Security' button when the wireless operating mode you selected is 'AP Bridge-Point to Point', 'AP Bridge-Point to Multi-Point', or 'AP Bridge-WDS'.

Mode :	AP Bridge-Point to Point
Band :	2.4 GHz (B+G+N) 🔽
Channel Number :	11 💌
MAC address 1 :	0000000000
Set Security :	Set Security
	Apply Cancel

B. Security:

1. Click 'Security' on the left of web management interface.

JIGISO	L DG-WA3000NP Wireless Access Point with PoE
Home Basic Settings WPS Setting	Security This page allows you to setup the wireless security. Enabling WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.
Advanced Settings Security Radius Server	Select SSID SSID choice : Digisol Security Settings Encryption : Disable Product Solution
MAC Filtering System Utility Configuration Tool	Apply Cancel
Upgrade Reset	

NOTE: If you have enabled Multiple SSID function, please select the SSID network you wish to configure in advance.



There are four types of security levels you can select: Disable (no security - data encryption disabled), WEP, WPA Pre-shared Key, and WPA Radius. Please refer to the following sections for detailed instructions.

There are several things you can do to improve wireless security:

- 1. Always enable data encryption. Only disable it when you want to open your wireless Access Point to the public.
- 2. Never use simple words as encryption password. Using a random combination of symbols, numbers, and alphabets will greatly improve security.
- 3. Use WPA when possible it's much safer than WEP.
- 4. Change encryption password when you've used it for a longer period.



2-7-1 Disable Security

Select the SSID you wish to configure. When you select 'Disable', wireless encryption for the network is disabled.

Security	
This page allows you to setup the wireless security. Enabling WEP or W unauthorized access to your wireless network.	PA by using Encryption Keys could prevent any
Select SSID SSID choice : Digisol	
Security Settings	
Encryption : Disable	
Enable 802.1x Authentication	Apply

After you finish with setting, please click 'Apply', and the following message will be displayed:

Save settings successfully!
You may press CONTINUE button to continue configuring other settings or press APPLY button to restart the system to make the changes take effect.
CONTINUE



2-7-2 WEP

WEP (Wired Equivalent Privacy) is a common encryption mode, it's safe enough for home and personal use. But if you need higher level of security, please consider using WPA encryption (see next Section).

However, some wireless clients don't support WPA, but only support WEP, so WEP is still a good choice for you if you have such kind of clients in your network environment.

When you select 'WEP' as encryption type, the following fields will be displayed:

Security Settings
Encryption : WEP
Key Length : 64-bit 🔽
Key Format : Hex (10 characters) 💌
Default Tx Key : 🛛 🔽
Encryption Key 1 :
Encryption Key 2 :
Encryption Key 3 :
Encryption Key 4 :
Enable 802.1x Authentication
(Apply) (Cancel)

Parameter	Description
Key Length	There are two types of WEP key length: 64-bit and
	128-bit. Using '128-bit' is safer than' 64-bit', but
	will reduce the data transfer performance to some
	extent.
Key Format	There are two types of key format: ASCII and Hex.
	When you select a key format, the number of
	characters of key will be displayed. For example, if
	you select '64-bit' as key length, and 'Hex' as key
	format, you'll see the message at the right of 'Key



	Format' is 'Hex (10 characters), which means the
	length of WEP key is 10 characters.
Default Tx Key	You can set up to four sets of WEP key, and you
	can decide which key is being used by default here.
	If you don't know which one you should use,
	select 'Key 1'.
Encryption Key 1 to 4	Input WEP key characters here, the number of
	characters must be the same as the number
	displayed at 'Key Format' field. You can use any
	alphanumerical characters (0-9, a-z, and A-Z) if
	you select 'ASCII' key format, and if you select
	'Hex' as key format, you can use characters 0-9, a-
	f, and A-F. You must enter at least one encryption
	key here, and if you entered multiple WEP keys,
	they should not be the same.
Enable 802.1x	Check this box to enable 802.1x user
Authentication	authentication. Please refer to Section 2-7-5 for
	detailed instructions.

Save setting	is successfully!
You may press C(make the changes	NTINUE button to continue configuring other settings or press APPLY button to restart the system to take effect.
CONTINUE	APPLY



2-7-3 WPA Pre-shared Key

WPA Pre-shared key is the safest encryption method currently, and it's recommended to use this encryption method to ensure the safety of your data.

When you select 'WPA pre-shared key' as encryption type, the following fields will be displayed:

Encryption :	WPA pre-share	d key 💙	
WPA Unicast Cipher Suite :	⊙ WPA(TKIP)	OWPA2(AES)	OWPA2 Mixed
Pre-shared Key Format :	Passphrase	*	
Pre-shared Key :	kolalakakolalak		
		Apply	Cancel

Parameter	Description
WPA Unicast	Available options are: WPA (TKIP), WPA2 (AES),
Cipher Suite	and WPA2 Mixed. You can select one of them, but
	you have to make sure, your wireless client
	supports the cipher you selected.
Pre-shared Key	Please select the format of pre-shared key here,
Format	available options are 'Passphrase' (8 to 63
	alphanumerical characters) and 'Hex (64
	hexadecimal characters -0 to 9 and a to f).
Pre-shared Key	Please input pre-shared key according to the key
	format you selected here. For security reason, don't
	use simple words.



	,
/ou may press C	ONTINUE button to continue configuring other settings or press APPLY button to restart the system to
make the changes	take effect.

When you see this message, the settings you made are successfully saved. You can click on 'Continue' button to go back to previous page and continue with other settings, or click 'Apply' button to restart the wireless Access Point and the changes will take effect after about 30 seconds.

2-7-4 WPA RADIUS

WPA Radius is the combination of WPA encryption method and RADIUS user authentication. If you have a RADIUS authentication server, you can check the identity of every wireless client by user database.

When you select 'WPA RADIUS' as encryption type, the following fields will be displayed:

Encryption :	WPA RADIUS	~	
WPA Unicast Cipher Suite :	⊙ WPA(TKIP)	OWPA2(AES)	OWPA2 Mixed
Use internal MD5/PEAP R/	ADIUS Server		
RADIUS Server IP address :			
RADIUS Server Port :	1812		
RADIUS Server Password :			
		Apply	Cancel



Here is the description of every setup item:

Parameter	Description		
WPA Unicast	You can select WPA encryption type here. AES is safer		
Cipher Suite	than TKIP, but not every wireless client supports it.		
	Please refer to the specification of your wireless client to		
	decide which encryption type you should use.		
Use internal	Uses built-in RADIUS Server (refer to Section 2-8)		
MD5/PEAP	instead of external RADIUS server. If you check this		
RADIUS Server	box, the value in following three fields will be ignored.		
RADIUS Server IP	Please input the IP address of RADIUS authentication		
address	server here.		
RADIUS Server	Please input the port number of RADIUS authentication		
Port	server here. Default value is 1812.		
RADIUS Server	Please input the password of RADIUS authentication		
Password	server here.		

After you finish with setting, please click 'Apply', and the following message will be displayed:

Save settings successfully!		
You may press C make the change:	ONTINUE button to continue configuring other settings or press APPLY button to restart the system to take effect.	
CONTINUE	APPLY	



2-7-5 802.1x Authentication

You can enable 802.1x user identification (based on RADIUS user authentication server) by checking 'Enable 802.1x Authentication' box when you select 'Disable' or 'WEP' as encryption type, and the following message will be displayed:

Encryption :	Disable		~			
Use internal MD5/PEAP R/	ADIUS Serv tion	ver				
RADIUS Server IP address :						
RADIUS Server Port :	1812					
RADIUS Server Password :						
			App	ly	Cance	D

Parameter	Description
Use internal	Uses built-in RADIUS Server (refer to next Section)
MD5/PEAP	instead of external RADIUS server. If you check this box,
RADIUS Server	the value of internal RADIUS server fields will be
	ignored.
Enable 802.1x	Enables or disables the use of 802.1x user authentication.
Authentication	
RADIUS Server IP	Please input the IP address of RADIUS authentication
address	server here.
RADIUS Server	Please input the port number of RADIUS authentication
Port	server here. Default value is 1812.
RADIUS Server	Please input the password of RADIUS authentication
Password	server here.



Save setting	js successfully!
You may press CC make the changes	INTINUE button to continue configuring other settings or press APPLY button to restart the system to take effect.
CONTINUE	APPLY



2-8 Radius Server

Compared to other wireless security measures, radius server provides userbased authentication. If your wireless client supports 802.1x user authentication, you can use the 'Radius Server' function to use the internal mini radius server to improve security and wireless user control.

The internal radius server only supports 96 users and 16 IP addresses. If the number of users and/or IP addresses you need is more than this, please use external radius server.

To setup internal radius server, click 'Radius Server' on the left of web management interface, and the following information will be displayed:

	JIGISO	L DG-WA3000NP	Wireless Access Point with PoE
	Home	Radius Server	
	Basic Settings	This page allows you to set the internal Radius Server. This server can be used as the Authentication server for other wireless devices.	
	WPS Setting	Enable Radius Server	
	Advanced Settings	Users Profile (up to 96 users)	
	Security	Username Password Re-Type Password Configure	
1	Radius Server		
	MAC Filtering	NO. Username Select	
	System Utility	Delete Selected Delete All Reset	
	Configuration Tool	Authentication Client (up to 16 clients)	
	Upgrade	Client IP Secret Key Re-Type Secret Key Configure	
	Reset		
		NO. Client IP Select	
		Delete Selected Delete All Reset	
			pply Cancel



The following parameters are of radius server:

Enable Radius Serve Users Profile (up to 96 us	er sers)		
Username	Password	Re-Type Password	Configure Add Reset
NO.	Username		Select
1	chen		
Delete Selected Authentication Client (up Client IP	Delete All Res to 16 clients) Secret Key	et Re-Type Secret Key	Configure
NO	Client IP		Add Reset
1	192.168.2.25		
Delete Selected	Delete All Res	et	
		Apply	Cancel

Parameter	Description
Enable Radius	Check this box to enable internal radius server
Server	function.
User Profile	You can add or delete radius user here. Please input username, password, re-type password in corresponding fields, and click 'Add' button to add the user to radius server database. You can click 'Reset' to clear the text you typed in above three fields.
	All current radius users will be listed here. If you want to delete one or more users, check 'Select' box of that


	user, and click 'Delete Selected' button; you can click 'Delete All' button to delete all the users in the radius server database. You can also click 'Reset' button to uncheck all 'Select' boxes.
Authentication	You can add allowed radius client IP addresses here.
Client	Please input client IP, secret key, re-type secret key in corresponding fields, and click 'Add' button to add the IP address to radius server database. You can click 'Reset' to clear the text you typed in above three fields.
	All current IP addresses will be listed here. If you want to delete one or more addresses, check 'Select' box of that address, and click 'Delete Selected' button; you can click 'Delete All' button to delete all addresses in radius server database. You can also click 'Reset' button to uncheck all 'Select' boxes.

After you finish with setting, please click 'Apply', and the following message will be displayed:

Save settings successfully!	
You may press CONTINUE button to continue configuring other settings or press APPLY button to restart the system to make the changes take effect.	
CONTINUE	



2-9 MAC Filtering

Another security measure you can use to keep hackers and intruders away is 'MAC filtering'. You can pre-define a so-called 'white-list', which contains MAC addresses of the wireless clients you trust. All other wireless clients with MAC addresses which are not in your list will be denied by this wireless Access Point.

To setup MAC filtering, please click 'MAC Filtering' on the left of web management interface.

JIGISC	DG-WA3000NP	Wireless Access Point with PoE
Home	MAC Address Filtering	raaaa Paint
WPS Setting	Select SSID: Digisol V	CLESS FUILL.
Advanced Settings Security	MAC Address Filtering Table Maximum 20 mac addresses allowed.	
Radius Server	NO. MAC Address Comment Select	
System Utility	Delete Selected Delete All Reset	
Configuration Tool	Enable Wireless Access Control	
Upgrade	New MAC Address: Comment: Add Clear	
Reset		pply Cancel



The following messages will be displayed:

MAC Address Filtering		
For security reasons, the Access Point features MAC Address Filtering that only allows authorized MAC Address to associate with the Access	s Point.	
Select SSID : Digisol 👻		
Maximum 20 mac addresses allowed.	Address	
NO. MAC Address Comment Select	filtering	
	able(1)	
Delete Selected Delete All Reset		
Enable Wireless Access Control		
New MAC Address: Comment: Add Clear		
Apply	Cancel	
_'		
//		
This page contains two parts of MAC filtering information. All allowed \mathbf{N}	Auu	
MAC addresses will be listed in upper part (1), and you can add new	new entry	
MAC addresses by components in lower part (2). here (2)		

Here is the description of every setup item:

Parameter	Description	
Select	Check this box to select one or more MAC address (es) to	
	delete.	
Delete Selected	Click this button to delete all selected MAC address (es).	
Delete All	Delete all MAC address entries.	
Reset	Uncheck all selected MAC address entries.	
Enable Wireless	Check this box to enable MAC address restriction. If	
Access Control	unchecked, no restriction will be enforced (any wireless	
	client with proper encryption setting will be able to connect	
	to this wireless Access Point).	
MAC address	Input MAC address here, which this wireless Access Point	
	will permit to access. You need not add colon (:) or hyphen	
	(-), just input 0 to 9 and a to f here, like 112233445566 or	
	aabbccddeeff.	
Comment	You can input any text here as the comment of this MAC	
	address, like 'ROOM 2A Computer' or anything. You can	



	input up to 16 alphanumerical characters here. This is optional and you can leave it blank, however, it's recommended to use this field to write a comment for every	
	MAC addresses as a memory aid.	
Add	When you finish inputting MAC address and (optional)	
	Comment, click this button to add the MAC address to the	
	list.	
Clear	Remove all characters in 'MAC address' and 'Comment'	
	field.	

After you finish with setting, please click 'Apply', and the following message will be displayed:

successfully!
NUE button to continue configuring other settings or press APPLY button to restart the system to e effect.
APPLY
е Г



2-10 System Utility

This Access Point provides some control functions, which include password, IP address management, and DHCP server function. Please click 'System Utility' on the left of web management interface to access these functions as shown below.

J IGISOĽ	DG-WA3000NP	Wireless Access Point with PoE
Home	System Utility	1
Basic Settings	This page allows you to set the Management IP and administrator password for the Access Point. Also, settings for in-built DHCP server of	an be configured here.
WPS Setting		
Advanced Settings	Password Settings	
Security	Current Password	
Radius Server	New Password :	
MAC Filtering	Re-Enter Password :	
System Utility	Management IP	
Consultation Tool	IP Address : 192.168.2.1	1
Upgrade	Subnet Mask : 255 255 0	
Reset	Gateway Address : 0.0.0.0	
	DHCP Server : Disabled	
	DHCP Server	
	Default Gateway IP : 0.0.0.0	
	Domain Name Server IP : 0.0.0.0	
	Start IP : 192.168.2.100	
	End IP: 192.168.2.200	
	Domain Name :	
	Lease Time : Forever	

Below are detailed descriptions of every control function.

2-10-1 Change Password

You can change the password used to enter the web configuration menu of this wireless Access Point.

Password Settings	
Current Password :	
New Password :	
Re-Enter Password :	



Please input current password in 'Current Password' field, then input new password in both 'New Password' and 'Re-Enter Password' fields.

After you finish, please go to the bottom of this page and click 'Apply'. Login screen will pop up, enter the newly configured password and press ok button.

Connect to 192.1	68.2.1 🛛 🛛 🔁
	GA
Default: admin/1234	
User name:	😰 I 🛛 💌
Password:	
	Remember my password
	OK Cancel

Save settings successfully!
You may press CONTINUE button to continue configuring other settings or press APPLY button to restart the system to make the changes take effect.
CONTINUE APPLY



2-10-2 IP Address of the Wireless Access Point

You can change the IP address of this wireless Access Point, so it can become a part of your local network. Please remember this address, or you will not be able to connect to the configuration menu of this wireless Access Point.

Default IP address is: 192.168.2.1 / Subnet Mask 255.255.255.0, you can press and hold 'Reset/WPS' button over 10 seconds to change the IP address back to default value if you forget the IP address you set.

 Management IP 	
IP Address :	192.168.2.1
Subnet Mask :	255.255.255.0
Gateway Address :	0.0.0.0
DHCP Server :	Disabled 💌

Please input IP address and Subnet Mask in corresponding fields. You can also input IP address of the gateway in 'Gateway Address' field, if you need to manage this wireless Access Point from other network (like Internet).

If you want to activate the DHCP server function of this wireless Access Point, please select 'Enabled' in 'DHCP Server' option, and see next Section for detailed instructions. If you don't want to use DHCP server function of this wireless Access Point, or there's another DHCP server on the network this Access Point connects to, please select 'Disabled'.



After you finish, please go to the bottom of this page and click 'Apply', and the following message will be displayed:

ou may press CONTINUE button to c	continue configuring other settings or press APPLY button to restart the system to
ike the changes take effect.	



2-10-3 DHCP Server

This wireless Access Point is capable to act as a DHCP server for your network, and it's disabled by default.

•	DHCP Server	
	Default Gateway IP :	0.0.0.0
	Domain Name Server IP :	0.0.0.0
	Start IP :	192.168.2.100
	End IP :	192.168.2.200
	Domain Name :	
	Lease Time :	Forever

NOTE: Please remember to select 'Enabled' in 'DHCP Server' option as described in last Section, or all DHCP-related fields will be grayed out, and you will not be able to input any DHCP parameter.

Here is the description of every setup item:

Parameter	Description
Default Gateway	Please input the IP address of default gateway of
IP	your network here.
Domain Name	Please input the IP address of domain name server
Server IP	(DNS) here.
Start IP	Please input the start IP address of the IP range.
End IP	Please input the end IP address of the IP range.
Domain Name	If you wish, you can also input the domain name
	for your network. This is optional.
Lease Time	Please choose a lease time (the duration that every
	computer can keep a specific IP address) of every
	IP address assigned by this Access Point from
	dropdown menu.



After you finish, please click 'Apply', and the following message will be displayed:

Save setting	s successfully!
You may press CC make the changes	JTINUE button to continue configuring other settings or press APPLY button to restart the system to ake effect.
CONTINUE	APPLY



3. Advanced Configuration

3-1 Configuration Backup and Restore

You can backup all configurations of this Access Point to a file, so you can make several copies of the Access Point configuration for security reason.

To backup or restore Access Point configuration, please follow the instructions mentioned below:

Please click 'Configuration Tool' on the left of the web management interface.

JIGISOL	DG-WA3000NP	Wireless Access Point with PoE
Home	Configuration Tool	
Basic Settings	Use the "Backup" tool to save the Access Point's current configurations to a file named "config.bin". You can then use the "Restore" tool to re configuration to the Access Point. Alternatively, you can use the "Restore to Factory Default" tool to force the Access Point to perform System	store the saved n Reset and restore the
WPS Setting	original factory settings.	
Advanced Settings	Backup Settings : Save	
Security	Restore Settings : Browse Upload	
Radius Server	Restore to Factory Default : Reset	
MAC Filtering		
System Utility		
Configuration Tool		
Upgrade		
Reset		

The following message will be displayed on your web browser.

Backup Settings :	Save
Restore Settings :	Browse Upload
Restore to Factory Default :	Reset



Here is the description of every button:

Parameter	Description
Backup Settings	Press 'Save' button, and you'll be prompted to
	download the configuration as a file, default filename is
	'config.bin', you can save it as another filename for
	different versions, and keep it in a safe place.
Restore Settings	Press 'Browse' to pick a previously-saved
	configuration file from your computer, and then click
	'Upload' to transfer the configuration file to Access
	Point. After the configuration is uploaded, the Access
	Point's configuration will be replaced by the file you
	just uploaded.
Restore to Factory	Click this button to remove all settings you made, and
Default	restore the configuration of this Access Point back to
	factory default settings.



3-2 Firmware Upgrade

If there is a new firmware of this wireless Access Point, you can upload it which will change the firmware to the new one, to get extra functions or problem fix.

To perform firmware upgrade, please click 'Upgrade' on the left of web management interface

	IGISO	L DG-WA3000NP	Wireless Access Point with PoE
	Home	WEB Upgrade	
	Basic Settings	This tool allows you to upgrade the Access Point's system firmware.It is recommended to upgrade the firmware from wired station. Enter the path and name of the upprade file and then click the APPLY button below. You will be promoted to confirm the upprade.	
	WPS Setting		
	Advanced Settings	Browse	
	Security		
	Radius Server		
	MAC Filtering		
	System Utility		
	Configuration Tool		Apply Cancel
\langle	Upgrade		
	Reset		

The following message will be displayed:

WEB Upgrade		
This tool allows you to upgrade the Access Point's system firmware.It is recommended to upgrade the firmware from wired station. Enter the path and name of the upgrade file and then click the APPLY button below. You will be prompted to confirm the upgrade.		
Browse		
	Apply	Cancel

Click 'Browse...' button first, you'll be prompted to provide the filename of firmware upgrade file. Please download the latest firmware file from our website, and use it to upgrade your Access Point.



After a firmware upgrade file is selected, click 'Apply' button, and the Access Point will start the firmware upgrade procedure automatically. The procedure may take several minutes, please be patient.

NOTE: Never interrupt the upgrade procedure by closing the web browser or physically disconnecting your computer from the Access Point. If the firmware you uploaded is corrupt, the firmware upgrade will fail, and you may have to return this Access Point to the dealer of purchase to ask for help. (Warranty voids if you interrupt the upgrade procedure).



3-3 System Reset (Restart)

When you think the Access Point is not working properly, you can use this function to restart the Access Point; this may help and solve the problem.

This function is useful when the Access Point is far from you or unreachable. However, if the Access Point is not responding, you may have to switch it off by unplugging it from the power socket and plugging it back again after 10 seconds.

To reset your Access Point, please click 'Reset' on the left of the web management interface.





The following message will be displayed:

Reset	
In the event that the system stops responding correctly or stops functioning, you can perform a Reset. Your settings will not be changed. To per the APPLY button below. You will be asked to confirm your decision. The Reset will be complete when the Power LED stops blinking.	form the reset, click on
	Apply

Please click 'Apply', and a popup message will appear asking you again, to make sure you really want to reset the Access Point:

Message	from webpage 🛛 🔀
2	Do you really want to reset the Access Point ?
	OK Cancel

Click 'OK' to reset the Access Point, or click 'Cancel' to abort. Once you click on 'OK' the following screen will appear.



Then click 'OK'.

NOTE: Please remember all connections between wireless client and this Access Point will be disconnected while the unit is resetting.



4. Appendix

4-1 Hardware Specification

Flash: 4MB

SDRAM: 16MB

LAN Port: 10/100M UTP Port x 1

Antenna: 3dBi Detachable Dipole Antenna x 2 (2T2R Spatial Multiplexing MIMO configuration. These 2 antennas are for signal transmitting and receiving)

Power: 5VDC, 1A Switching Power Adapter

Net Dimension: 128 (L) x 84 (W) x 36 (H) mm

Gross Dimension: 276(L) x 210 (W) x 70 (H) mm

Net Weight : 140gms

Gross Weight : 570gms

Transmit Power:11n:14dBm ± 1.5dBm, 11g:15dBm ± 1.5dBm, 11b:17dBm ± 1.5dBm

Operating Temperature: 0 ~ 40°C

Storage Temperature: -5 ~ 45°C

Operating Humidity: 10-90% (Non-Condensing)

Storage Humidity: 5-95% (Non-Condensing)



4-2 Troubleshooting

If you find that the Access Point is not working properly or stops responding, don't panic! Before you contact your dealer of purchase for help, please read this troubleshooting section first. Some problems can be solved by yourself within very short time!

Scenario Solution	
Access Point is not	a. Please check the connection of power cord and network
responding when I	cable of this Access Point. All cords and cables should
want to access it by	be correctly and firmly inserted to the Access Point.
web browser	b. You must use the same IP address subnet which Access
	Point uses.
	c. Are you using MAC or IP address filter? Try to connect
	the Access Point by another computer and see if it
	works; if not, please perform a hard reset (pressing
	'reset' button).
	d. Set your computer to obtain an IP address
	automatically (DHCP), and see if your computer can
	get an IP address.
	e. If you did a firmware upgrade and this happens, contact
	your dealer of purchase for help.
	1. If all above solutions don't work, contact the dealer of purchase for help
Can't get connected	a If anoryption is anabled plassa ra check WED or WDA
to wireless Access	a. If encryption is enabled, please re-check wer of with passphrase settings on your wireless client
Point	b Try to move closer to wireless Access Point
1 OIIIt	c. Unplug the $\Delta ccess$ Point from the power socket and
	plug it again after 10 seconds. If the access point is
	powered through PoF then unplug the ethernet cable
	from the access point and plug it again after 10
	seconds.
I can't locate my	a. 'Broadcast ESSID' set to off?
Access Point by my	b. Are antennas properly installed and secured?
wireless client	c. Are you too far from your Access Point? Try to get
	closer.
	d. Please remember that you have to input ESSID on your
	wireless client manually, if ESSID broadcast is
	disabled.



File download is	a. Try to reset the Access Point and see if it's better after	
very slow or breaks	that.	
frequently	b. Try to know what other clients do on your local	
	network. If some clients are transferring files of big	
	size, other clients will get an impression that Internet is	
	slow.	
	c. Change channel number and see if this works.	
Access Point gets	a. This is not a malfunction as long as you are able to	
heated up	touch the Access Point's case.	
	b. If you smell something wrong or see smoke coming out	
	from the Access Point or the power adapter, please	
	disconnect the Access Point and power adapter from	
	utility power (make sure it's safe before doing this!),	
	and call your dealer of purchase for help.	



4-3 Glossary

Default Gateway (Access Point): Every non-Access Point IP device needs to configure default gateway's IP address. When the device sends out an IP packet and if the destination is not on the same network, the device has to send the packet to its default gateway, which will then send it to the destination.

DHCP: Dynamic Host Configuration Protocol. This protocol automatically gives every computer on your home network an IP address.

DNS Server IP Address: DNS stands for Domain Name System, which allows Internet servers to have a domain name (such as www.BroadbandAccess Point.com) and one or more IP addresses (such as 192.34.45.8). A DNS server keeps a database of Internet servers and their respective domain names and IP addresses, so that when a domain name is requested (as in typing "BroadbandAccess Point.com" into your Internet browser), the user is directed to the proper IP address. The DNS server IP address used by the computers on your home network is the location of the DNS server your ISP has assigned to you.

DSL Modem: DSL stands for Digital Subscriber Line. A DSL modem uses your existing phone lines to transmit data at high speeds.

Ethernet: A standard for computer networks. Ethernet networks are connected by special cables and hubs, and move data around at up to 10/100 million bits per second (Mbps).

Idle Timeout: Idle Timeout is designed so that when there is no traffic on the Internet for a pre-configured amount of time, the connection will automatically be disconnected.

IP Address and Network (Subnet) Mask: IP stands for Internet Protocol. An IP address consists of a series of four numbers separated by periods that identifies a single, unique Internet computer host in an IP network. Example: 192.168.2.1. It consists of 2 portions: the IP network address, and the host identifier.

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For example, if the IP address for a device is, in its binary form, <u>11011001.10110000.1001</u>0000.00000111, and if its network mask is, 11111111.11111111111110000.00000000 It means the device's network address is <u>11011001.10110000.1001</u>0000.00000000, and its host ID is, 00000000.00000000000000000111. This is a convenient and efficient method for Access Points to route IP packets to their destination.

ISP Gateway Address: (see ISP for definition). The ISP Gateway Address is an IP address for the Internet Access Point located at the ISP's office.

ISP: Internet Service Provider. An ISP is a business that provides connectivity to the Internet for individuals and other businesses or organizations.

LAN: Local Area Network. A LAN is a group of computers and devices connected together in a relatively small area (such as a home or office). Your home network is considered a LAN.

MAC Address: MAC stands for Media Access Control. A MAC address is the hardware address of a device connected to a network. The MAC address is a unique identifier for a device with an Ethernet interface. It is comprised of two parts: 3 bytes of data that corresponds to the Manufacturer ID (unique for each manufacturer), plus 3 bytes that are often used as the product's serial number.

NAT: Network Address Translation. This process allows all of the computers on your home network to use one IP address. Using the broadband Access Point's NAT capability, you can access the Internet from any computer on your home network without having to purchase more IP addresses from your ISP.



Port: Network Clients (LAN PC) uses port numbers to distinguish one network application/protocol over another. Below is a list of common applications and protocol/port numbers:

Application	Protocol	Port Number
Telnet	ТСР	23
FTP	ТСР	21
SMTP	ТСР	25
POP3	ТСР	110
H.323	ТСР	1720
SNMP	UCP	161
SNMP Trap	UDP	162
HTTP	ТСР	80
PPTP	ТСР	1723
PC Anywhere	TCP	5631
PC Anywhere	UDP	5632

PPPoE: Point-to-Point Protocol over Ethernet. Point-to-Point Protocol is a secure data transmission method originally created for dial-up connections; PPPoE is for Ethernet connections. PPPoE relies on two widely accepted standards, Ethernet and the Point-to-Point Protocol. It is a communication protocol for transmitting information over Ethernet between different manufacturers

Protocol: A protocol is a set of rules for interaction agreed upon between multiple parties so that when they interface with each other based on such a protocol, the interpretation of their behavior is well defined and can be made objectively, without confusion or misunderstanding.

Access Point: An Access Point is an intelligent network device that forwards packets between different networks based on network layer address information such as IP addresses.

Subnet Mask: A subnet mask, which may be a part of the TCP/IP information provided by your ISP, is a set of four numbers (e.g. 255.255.255.0) configured like an IP address. It is used to create IP address numbers used only within a particular network (as opposed to valid IP address numbers recognized by the Internet, which must be assigned by InterNIC).



TCP/IP, UDP: Transmission Control Protocol/Internet Protocol (TCP/IP) and Unreliable Datagram Protocol (UDP). TCP/IP is the standard protocol for data transmission over the Internet. Both TCP and UDP are transport layer protocols. TCP performs proper error detection and error recovery, and thus is reliable. UDP on the other hand is not reliable. They both run on top of the IP (Internet Protocol), a network layer protocol.

WAN: Wide Area Network. A network that connects computers located in geographically separate areas (e.g. different buildings, cities, countries). The Internet is a wide area network.

Web-based management Graphical User Interface (GUI): Many devices support a graphical user interface that are based on the web browser. This means the user can use the familiar Netscape or Microsoft Internet Explorer to Control/configure or monitor the device being managed.

PoE: Power-over-Ethernet: It is a means for delivering power to a remote device using the same cable lines used to deliver Ethernet data.

This product comes with Life time warranty. For further details about warranty policy and Product Registration, please visit support section of <u>www.digisol.com</u>

