

iDEA⁺ Docking Station User Manual

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FCC Radiation Norm

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

- (1) this device may not cause harmful interference , and
- (2) this device must accept any interference received, including interferences that may cause undesired operations.

CE Radiation Norm

This equipment has been tested and found to comply with the limits of the European Council Directive 99/5/EC on the approximation of the law of the member states relating to EN 300 328 V1.7.1 (2006-10), EN 301 489-1 V1.8.1 (2008-04) and EN 301 489-17 V1.3.2 (2008-04) and EN 60950.

FCC & CE Compliance Statement

These limits are designed to provide reasonable protection against radio interference in a residential environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment ON and OFF, the user is encouraged to try to reduce the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult a dealer or an experienced technician for assistance



RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

CAUTION!

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

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Chapter 1 Introduction

Congratulations on your purchase of this outstanding iDEA+ Docking Station. Great for traveler to charge iPad/iPhone, mobile devices. Working as an AP router for traveler to access Internet easily by their iPad, iPhone and Laptop via Wi-Fi. Support any 5V USB chargeable handheld devices including iPad, iPhone. With extra USB port, connecting a USB hard drive to act as a wireless HDD and support HTTP file server for iPad/iPhone to browse contents via browser. USB port supports Smartphone or 3G USB card to share Internet connection. With its Hotspot mode, it will let your network wirelessly and extend your wireless coverage.

1.1 Features

■ Functions

- Support Router, hotspot mode.
- Support Setup Wizard.
- Support File Server for user to playback Music/Video/Photo
- Support APP Configuration for Android Phone
- Support Simple configuration for Smart Phone

■ Wireless

- IEEE 802.11b/g/n standards compliant.
- Support data rates up to 150Mbps (Auto-Rate Capable).
- Support WEP/WPA/WPA2 Encryption.
- Support Wireless hotspot mode.

■ WAN Ethernet Interface

- 1 Port Interface compliant with IEEE 802.3x standards.
- Automatic MDI/MDIX crossover for 10/100 Base-T port.
- Auto-negotiation and speed-auto-sensing support.
- xDSL/Cable modem support
- WAN Access Type: Static IP,DHCP,PPPoE,3G USB and Android Mobile

■ Network Management

- Web-based Management
- Remote Access Control
- Firmware upgrade via HTTP/TFTP
- System Log

■ USB

- 5V/2.1A USB port for charging iPad/iPhone and Smartphone
- USB port for Smart Phone,3G USB card
- USB port for Flash Drive, USB Hard Drive, USB Card Reader

1.2 System Requirement

Check and confirm that your system/network meets the following requirements:

- Personal computer (PC/Notebook/Tablet PC) or Smartphone.
- One IEEE 802.11b/g/n Wireless adapter with installed TCP/IP
- Internet Browser.

1.3 Package Contents

The iDEA⁺ Docking Station package contains the following items:

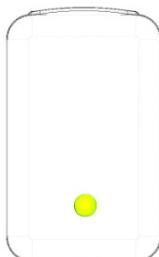
- One iDEA⁺ Docking Station
- One CD-ROM (Manual / Quick Setup Guide)
- One Quick Setup Guide

If any of the above items are damaged or missing, please contact your dealer immediately.

Chapter 2 Knowing iDEA+ Docking Station

2.1 LED Indicator

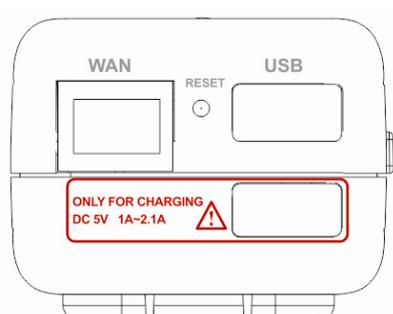
The iDEA+ Docking Station's LED indicator display information about the device's status.



Green	iDEA+ Docking Station access Internet successfully
Orange	Flashing when iDEA+ Docking Station cannot access Internet
Red	iDEA+ Docking Station is booting

2.2 Ports

The ports of the iDEA+ Docking Station contain WAN Ethernet port, Reset Button, USB data port and USB only for charging port.



WAN	Port for connecting to the cable or DSL modem through Ethernet cable
Reset	Reset iDEA+ Docking Station to factory default. Press this button for more than 5 secs
USB	Connect USB HDD, Flash Drive, 3G USB card and Smartphone
USB Charging	Only for Charging iPad, iPhone and Smartphone

2.3 Power ON/OFF

The Power ON/OFF Button of iDEA+ Docking Station.



2.4 Hardware Connection

This section describes the hardware connection mechanism of iDEA⁺ Docking Station connected to the Internet.

You need to prepare the following items before you can establish an Internet connection through your iDEA⁺ Docking Station:

1. A notebook/tablet PC which have wireless available.
2. Internet available of any ADSL/Cable modem or 3G USB card/3G Mobile phone.
3. Flash Drive/ USB hard drive.

Install the device

Gateway:

1. Insert one end of the Ethernet cable to the WAN port of iDEA⁺ Docking Station.
2. Insert one end of the Ethernet cable to the LAN port of ADSL/Cable modem which is Internet available.
3. Insert the flash drive to the USB port of iDEA⁺ Docking Station if you want to share the contents of flash drive to Wi-Fi devices.
4. Now other Wi-Fi devices can access Internet via your iDEA⁺ Docking Station via wireless.

Hotspot:

1. Wi-Fi devices connect to your iDEA⁺ Docking Station.
2. The iDEA⁺ Docking Station connects to root AP which is Internet available.
3. Configure your iDEA⁺ Docking Station to Hotspot mode.
4. Now the Wi-Fi devices can access Internet via your iDEA⁺ Docking Station and root AP.

3G USB Sharing:

1. Insert your 3G data card to the USB port of iDEA⁺ Docking Station.
2. Configure your iDEA⁺ Docking Station to 3GUSB mode.
3. Now the Wi-Fi devices can access Internet sharing your 3G network.

Android Mobile Sharing:

1. Insert your Android phone to the USB port of iDEA⁺ Docking Station.
2. Enable USB Tethering on your Android phone.
3. Configure your iDEA⁺ Docking Station to Android Mobile mode.
4. Now the Wi-Fi devices can access Internet sharing your 3G network.

Figures show the overall hardware connection mechanism of your iDEA⁺ Docking Station.

iDEA+ Travelling

- I** Camera SD card application
- II** Charging function for iPhone/iPad
- III** WiFi Internet Smart phone/Tablet/Laptop/PC

Hotel Room



Compatible



iPhone



Android Phone



iPad



Tablet PC



Notebook

IDEA+ Studio/SME

- I WiFi Wireless HDD / Flash Drive**
- II Personal Cloud** for document sharing
- III WiFi Internet Sharing** for Smart phone/Tablet/Laptop/PC

Studio Room



Compatible



iPhone



Android Phone



iPad



Tablet PC



Notebook



Home/Media

- I Wireless Media server for Photo / Music / Videos
- II Hotspot mode for wider WiFi coverage
- III WiFi Internet Sharing for Smart phone/Tablet/Laptop/PC



Home Room



Macair/Macbook/MacbookPro
Notebook/Tablet PC



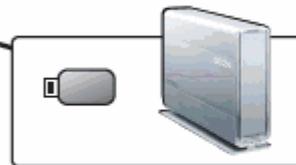
iPad / iPhone
Android Phone / Pad



Wireless xDSL



USB
HDD/Flash Drive



Compatible



iPhone



Android Phone



iPad



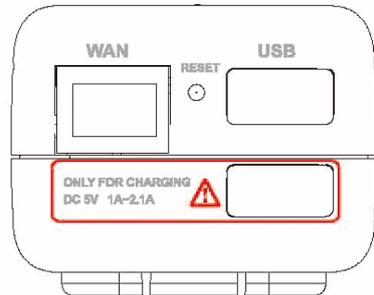
Tablet PC



Notebook

2.5 Charging

Support any 5V USB chargeable handheld devices including iPad, iPhone. Connect your iPad/iPhone or Smartphone to the USB charger port (red circle) of iDEA⁺ Docking Station.



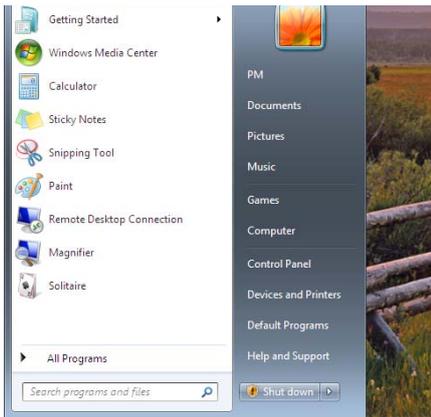
The USB port is only for charging. Do not plug any USB devices to this charging port.

Chapter 3 Configuration via PC

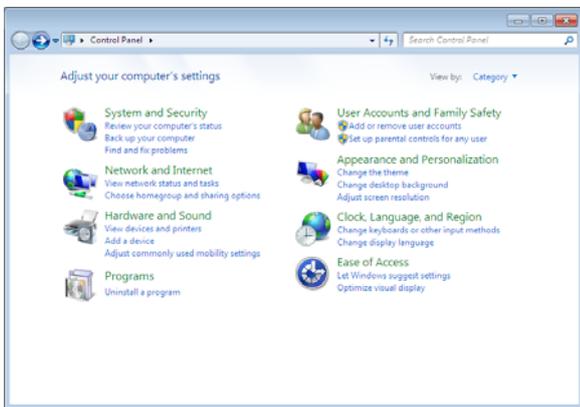
For your convenience, the web GUI allows you to configure iDEA⁺ Docking Station using web browser. This chapter will explain all the functions in this Web GUI.

3.1 Setting up the TCP/IP

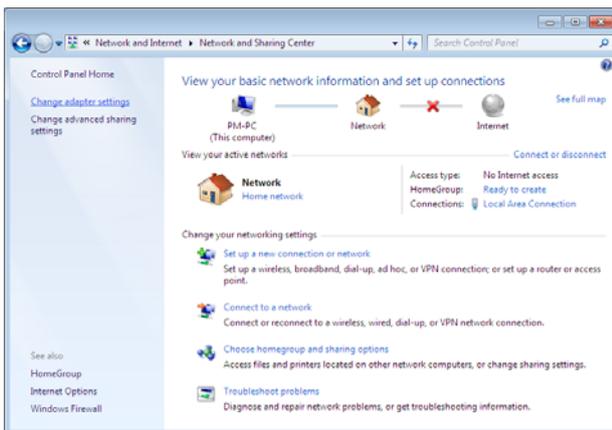
Step 1: Click **Start**→**Control Panel**.



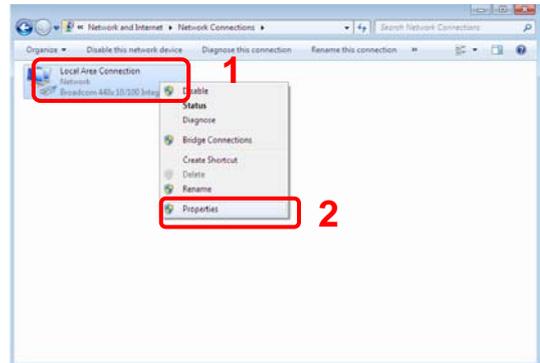
Step 2: Click the **View network status and tasks**.



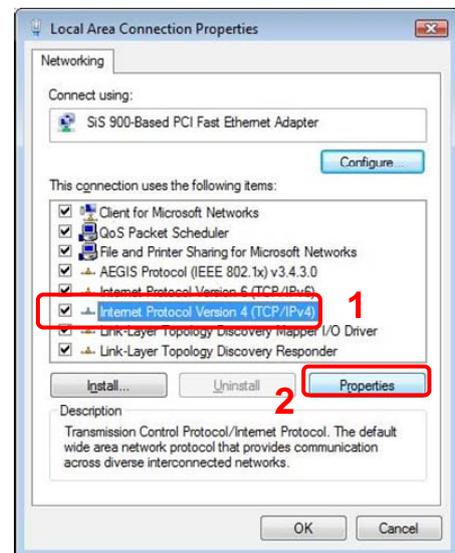
Step 3: Click on the **Change adapter settings**.



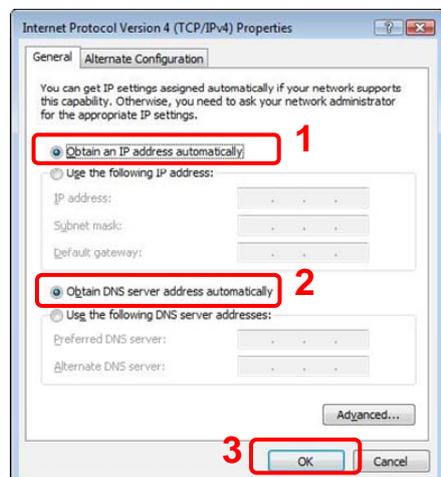
Step 4: Right click on the **Local Area Connection** and select **Properties**.



Step 5: Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties**.



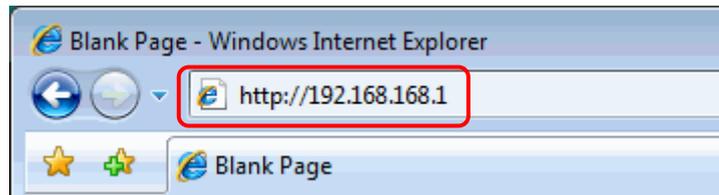
Step 6: Go to **General** icon, select **Obtain an IP address automatically** and **DNS server address automatically**.



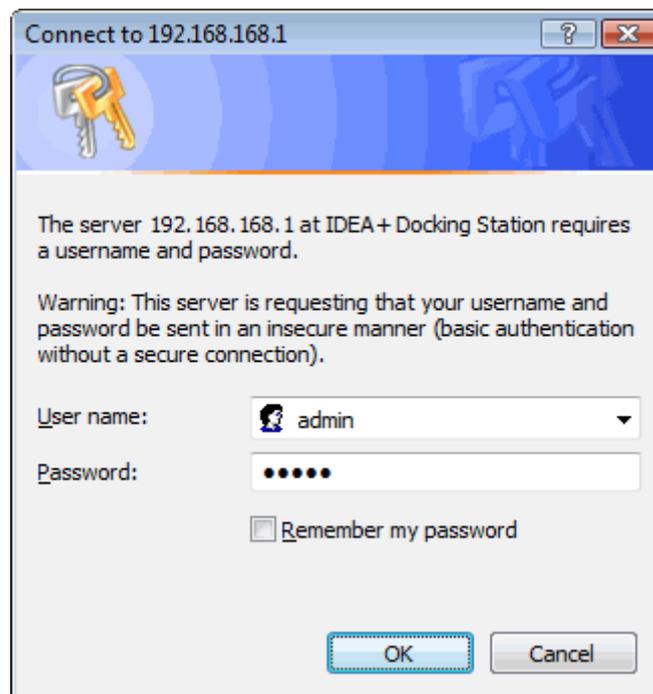
3.2 Login

To access the iDEA⁺ Docking Station configuration screens, follow the following steps will enable you to log into the iDEA⁺ Docking Station.

1. Launch your web browser, and enter the iDEA⁺ Docking Station's IP Address: **"192.168.168.1"** in the address field then press the **"Enter"** key to login.



2. Enter the default **User name: "admin"** and **Password: "admin"**. Then press **"OK"** to login.



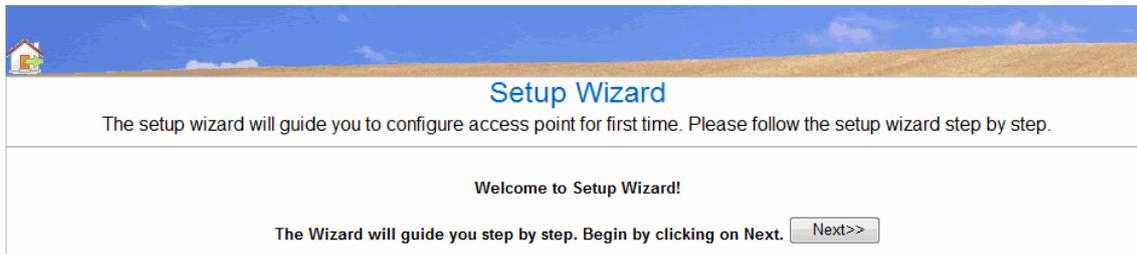
3. There are **Wizard**, **WAN**, **System Setting**, **Wireless** and **FileServer** icon to help you to configure the iDEA⁺ Docking Station easily.



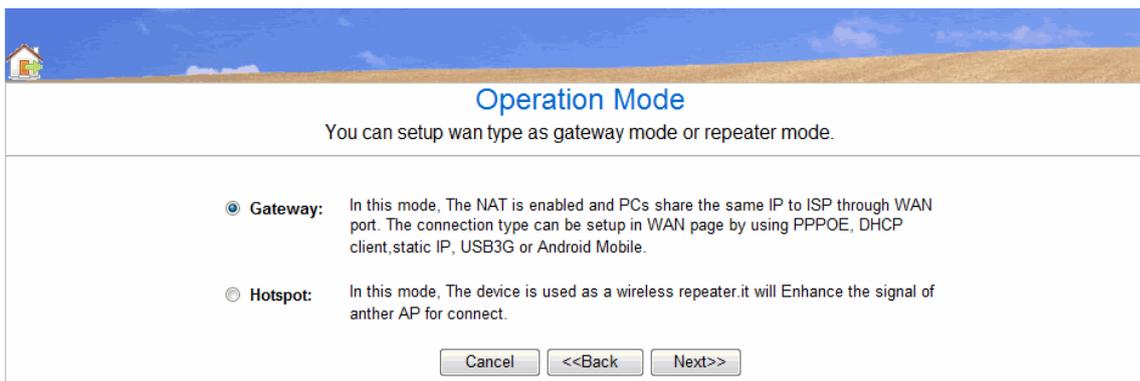
3.3 Wizard

Click on “**Wizard**” and the following screen will pop-up:

Click Next>> button to continue.



Choose Gateway or Hotspot mode.



3.3.1 Gateway Mode

In the Gateway mode, the iDEA⁺ Docking Station connects to Internet through ADSL modem, cable modem, 3G USB card or Android mobile phone.

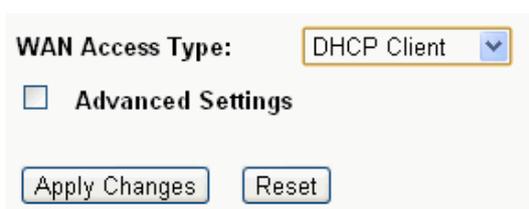
WAN access type: Static IP, DHCP, PPPoE, USB3G and Android Mobile.

Static IP, DHCP& PPPoE:



Select WAN access type from the drop-down list.

- **DHCP:** If you are using DHCP client, just click Apply changes to save the setting.



- **Static IP:** Please fill in IP address, subnet mask, Default Gateway, DNS IP address if you are using Static IP.

WAN Access Type:

Advanced Settings

IP Address:

Subnet Mask:

Default Gateway:

DNS 1:

DNS 2:

DNS 3:

- **PPPoE:** Please enter the username and password if you are using PPPoE connection.

WAN Access Type:

Advanced Settings

User Name:

Password:

USB3G



Please enter the information of APN service name, PIN code, dial number, account name and password if you choose USB3G and use 3G USB card to access Internet.

WAN Access Type:

Advanced Settings

User Name:

Password:

PIN:

APN:

Dial Number:

Android Mobile



Select Android Mobile in WAN Access Type then click Apply Changes.

WAN Access Type: ▼

Advanced Settings

1. Click Next>> button to continue.

The screenshot shows the 'WAN Interface Setup' page. At the top, there is a blue header with a house icon and the title 'WAN Interface Setup'. Below the header, a paragraph explains that this page is used to configure parameters for an Internet network connected to the WAN port of an Access Point, and lists options like static IP, DHCP, PPPoE, USB3G, and Android Mobile. The main content area has a label 'WAN Access Type:' followed by a dropdown menu currently set to 'DHCP Client'. Below this are three buttons: 'Cancel', '<<Back', and 'Next>>'.

2. Enter a wireless SSID.

The screenshot shows the 'Wireless Setup' page. It has a blue header with a house icon and the title 'Wireless Setup'. Below the header, a paragraph states that this page is used to configure parameters for wireless. The main content area has a label 'Wireless Network Name(SSID):' followed by a text input field containing 'IDEA+'. Below this is a note: 'For network security, wireless encryption is strongly recommended!'. There are three more labels: 'Encryption:' with a dropdown menu set to 'WPA2', 'Pre-Shared Key Format:' with a dropdown menu set to 'Passphrase', and 'Pre-Shared Key:' with an empty text input field. At the bottom are three buttons: 'Cancel', '<<Back', and 'Finished'.

3. Select Encryption and key.

- None
- WEP-64bits
- WEP-128bits
- WPA PSK
- WPA2 PSK
- WPA2 Mixed

4. Click "Finished" button to finish the settings.

5. Enter status page to check the information in Gateway mode.

iDEA+ Docking Station Status
This page shows the current status and some basic settings of the device.

System	
Uptime	0day:0h:0m:47s
Firmware Version	7011N_NBA_120911.02FA
Build Time	Thu Jan 5 00:51:28 EST 2012

Wireless Configuration	
Mode	AP
Band	2.4 GHz (B+G+N)
SSID	iDEA+
Channel Number	6
Encryption	Disabled
BSSID	00:13:64:00:00:15
Associated Clients	1

WAN Configuration	
Attain IP Protocol	DHCP
IP Address	192.168.12.67
Subnet Mask	255.255.255.0
Default Gateway	192.168.12.1
MAC Address	00:13:64:00:00:16
Gateway/Hotspot Mode Switch	<input type="button" value="Switch to Hotspot mode"/>

3.3.2 Hotspot Mode

In the Hotspot mode, the iDEA+ Docking Station connects to xDSL/Cable wireless router via wireless and allows Wi-Fi devices to share the Internet connection. It also extends the wireless network coverage.

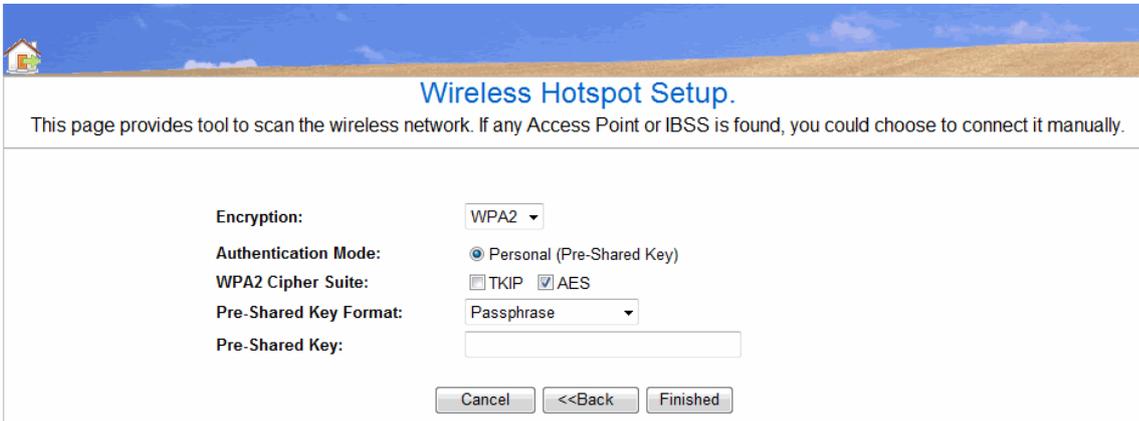


To configure iDEA+ Docking Station charger to Hotspot mode:

1. Click “Scan network” button and select a root AP router to connect.

Wireless Hotspot Setup.
This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually.

2. Select Encryption and key of the root AP router and click “Finished” button to save the settings.



Wireless Hotspot Setup.

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually.

Encryption:

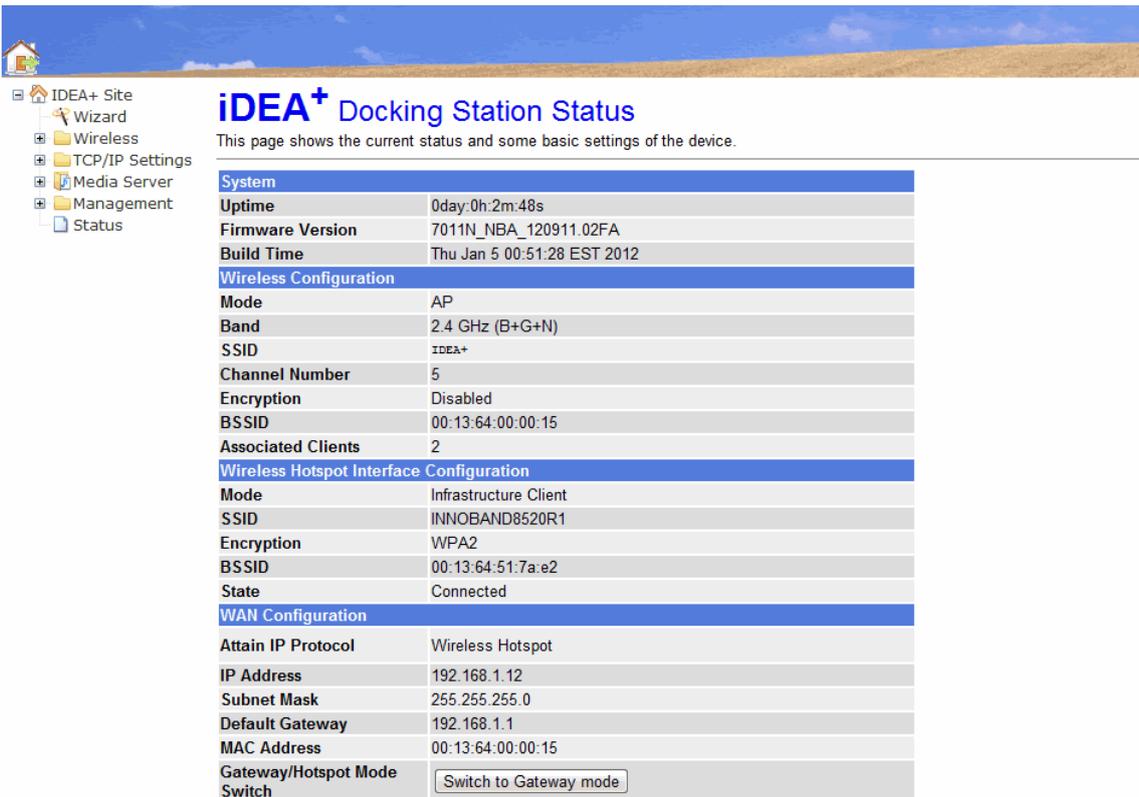
Authentication Mode: Personal (Pre-Shared Key)

WPA2 Cipher Suite: TKIP AES

Pre-Shared Key Format:

Pre-Shared Key:

3. Enter Status page to check the information in Hotspot mode.



iDEA+ Docking Station Status

This page shows the current status and some basic settings of the device.

System	
Uptime	0day:0h:2m:48s
Firmware Version	7011N_NBA_120911.02FA
Build Time	Thu Jan 5 00:51:28 EST 2012
Wireless Configuration	
Mode	AP
Band	2.4 GHz (B+G+N)
SSID	iDEA+
Channel Number	5
Encryption	Disabled
BSSID	00:13:64:00:00:15
Associated Clients	2
Wireless Hotspot Interface Configuration	
Mode	Infrastructure Client
SSID	INNOBAND8520R1
Encryption	WPA2
BSSID	00:13:64:51:7a:e2
State	Connected
WAN Configuration	
Attain IP Protocol	Wireless Hotspot
IP Address	192.168.1.12
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
MAC Address	00:13:64:00:00:15
Gateway/Hotspot Mode Switch	<input type="button" value="Switch to Gateway mode"/>

3.4 Wireless

Click Wireless icon and it will show the wireless Basic Settings. A screen is displayed as shown in following figure.

Fields in this page:

Field	Description
Band	Select the appropriate band from the list provided to correspond with your network setting.
SSID	The Service Set Identifier (SSID) or network name. It is case sensitive and must not exceed 32 characters, which may be any keyboard character. The mobile wireless stations shall select the same SSID to be able to communicate with your iDEA ⁺ Docking Station.
Channel Width	The selections are 40MHz or 20MHz.
Control Sideband	The selections are Upper or Lower.
Channel Number	Select the appropriate channel from the list provided to correspond with your network settings. You shall assign a different channel for each AP to avoid signal interference.
Broadcast SSID	The selections are Enabled or Disabled.
WMM	Wi-Fi Multimedia (WMM) is a wireless Quality of Service feature that improves quality of audio, video, and voice applications by prioritizing wireless traffic. To use this feature, the wireless client devices in your network must support Wireless WMM. Enabled by Default.
Data Rate	The selections are Auto, 1M, 2M, 5.5M, 11M, 6M, 9M, 12M, 18M, 24M, 36M, 48M, 54M, MCS0, MCS1, MCS2, MCS3, MCS4, MCS5, MCS6 and MCS7.

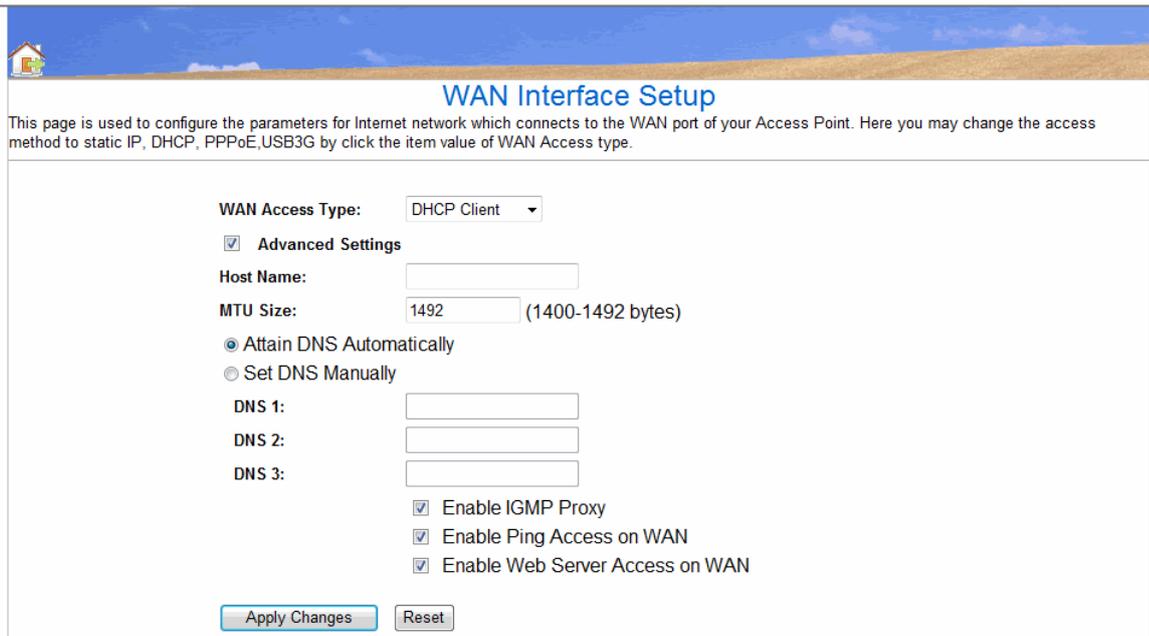
Apply Changes

Change the settings. New parameters will take effect after save into flash memory and please reboot device.

3.5 WAN

Click WAN icon and it will show the WAN Interface Setup. A screen is displayed as shown in following figure. This page is used to configure the parameters for Internet network which connects to the WAN port or USB port of iDEA⁺ Docking Station. Here you may change the access type to static IP, DHCP, PPPoE, USB3G or

Android Mobile by click the item value of WAN Access type.



The image shows a web-based configuration page titled "WAN Interface Setup". At the top left, there is a small house icon. The page has a header with a blue sky and yellow ground background. Below the header, there is a paragraph of text explaining the page's purpose: "This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, USB3G by click the item value of WAN Access type." The main content area contains several configuration options: "WAN Access Type" is a dropdown menu set to "DHCP Client"; "Advanced Settings" is a checked checkbox; "Host Name" is an empty text input field; "MTU Size" is a text input field with "1492" and "(1400-1492 bytes)" next to it; "Attain DNS Automatically" is a selected radio button, while "Set DNS Manually" is unselected; "DNS 1:", "DNS 2:", and "DNS 3:" are each followed by an empty text input field; "Enable IGMP Proxy", "Enable Ping Access on WAN", and "Enable Web Server Access on WAN" are all checked checkboxes; and at the bottom, there are two buttons: "Apply Changes" and "Reset".

WAN Interface Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, USB3G by click the item value of WAN Access type.

WAN Access Type:

Advanced Settings

Host Name:

MTU Size: (1400-1492 bytes)

Attain DNS Automatically

Set DNS Manually

DNS 1:

DNS 2:

DNS 3:

Enable IGMP Proxy

Enable Ping Access on WAN

Enable Web Server Access on WAN

3.6 File Server

First, please connect your card reader, flash driver or USB Hard Drive to the USB port of the iDEA⁺ Docking Station. Then click **File Server** icon and it will list all the folders and files in your Flash Driver or USB HDD.

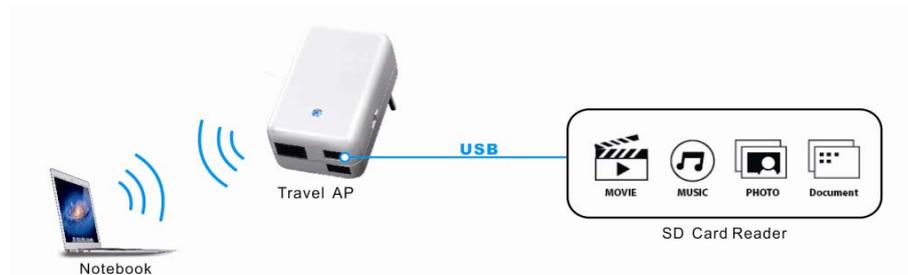
It acts as a wireless HDD and support HTTP file server for iPad/iPhone to browse contents (Photo, Music, Video) via browser.

You can also use Android Phone as USB storage device. Please refer to the user manual of Android Phone to turn on USB storage.

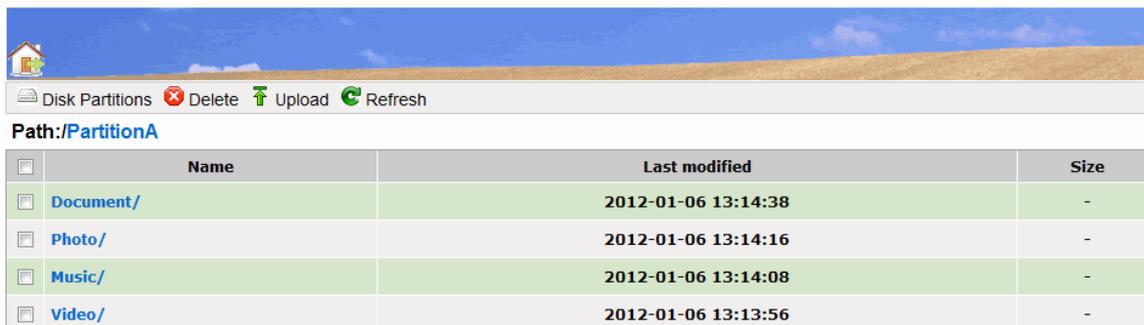
Flash Drive/USB Hard Drive:



Card Reader



Here is the file list.



Icon in this page:

Icon	Description
Disk Partitions	Click this icon to see the disk partition of your USB HDD.
Delete	Check folder or files you want to delete then click Delete icon to delete them.
Upload	Click Upload icon and choose a file to upload to the flash drive which connects with the iDEA ⁺ Docking Station.
Refresh	Refresh the contents in the USB disk.

3.7 System setting

3.7.1 Wireless

Click System Setting icon and you can view Wireless link in the left navigation bar. Following are the options available under Wireless:

- Basic Settings
- Active Clients
- Advanced Settings
- Security
- Hotspot Mode

3.7.1.1 Basic Settings

To configure the wireless basic settings, click on the **Basic Settings** link in the left navigation bar. A screen is displayed as shown in following figure.

The screenshot shows a web interface for configuring wireless settings. On the left is a navigation tree with 'Wireless' expanded to 'Basic Settings'. The main content area is titled 'Wireless Basic Settings' and contains a list of configuration options, each with a dropdown menu or text input field. The options are: Band (2.4 GHz (B+G+N)), SSID (IDEA+), Channel Width (40MHz), Control Sideband (Upper), Channel Number (6), Broadcast SSID (Enabled), WMM (Enabled), and Data Rate (Auto). At the bottom of the configuration area are two buttons: 'Apply Changes' and 'Reset'.

Fields in this page:

Field	Description
Band	Select the appropriate band from the list provided to correspond with your network setting.
SSID	The Service Set Identifier (SSID) or network name. It is case sensitive and must not exceed 32 characters, which may be any keyboard character. The mobile wireless stations shall select the same SSID to be able to communicate with your wireless broadband router.
Channel Width	The selections are 40MHz or 20MHz.
Control Sideband	The selections are Upper or Lower.
Channel Number	Select the appropriate channel from the list provided to correspond with your network settings. You shall assign a different channel for each AP to avoid signal interference.
Broadcast SSID	The selections are Enabled or Disabled.
WMM	Wi-Fi Multimedia (WMM) is a wireless Quality of Service feature that improves

	quality of audio, video, and voice applications by prioritizing wireless traffic. To use this feature, the wireless client devices in your network must support Wireless WMM. Enabled by Default.
Data Rate	The selections are Auto, 1M, 2M, 5.5M, 11M, 6M, 9M, 12M, 18M, 24M, 36M, 48M, 54M, MCS0, MCS1, MCS2, MCS3, MCS4, MCS5, MCS6 and MCS7.

Apply Changes

Change the settings. New parameters will take effect after save into flash memory and please reboot device.

3.7.1.2 Active Clients

Click on **Active Clients** link and it will show the clients currently associated with the iDEA⁺ Docking Station.

The screenshot shows the web interface for the iDEA+ Docking Station. On the left is a navigation tree with the following items: IDEA+ Site, Wizard, Wireless (expanded), Basic Settings, Active Clients (highlighted), Advanced Settings, Security, Hotspot Mode, TCP/IP Settings, Media Server, Management, and Status. The main content area is titled "Active Wireless Client Table" and includes a description: "This table shows the MAC address, transmission, reception packet counters and encrypted status for each associated wireless client." Below the description is a table with the following data:

MAC Address	Mode	Tx Packet	Rx Packet	Tx Rate (Mbps)	Power Saving	Expired Time (s)
00:13:64:00:00:0d	11n	138	375	150	no	300

Below the table are two buttons: "Refresh" and "Close".

3.7.1.3 Advanced Setting

This page allows advanced users who have sufficient knowledge of wireless LAN. These setting shall not be changed unless you know exactly what will happen for the changes you made on your router.

Fields in this page:

Field	Description
Fragment Threshold	This value should remain at its default setting of 2346. It specifies the maximum size for a packet before data is fragmented into multiple packets. If you experience a high packet error rate, you may slightly increase the “Fragment Threshold” value within the value range of 256 to 2346. Setting this value too low may result in poor network performance. Only minor modifications of this value are recommended.
RTS Threshold	This value should remain at its default setting of 2347. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the preset “RTS threshold” size, the RTS/CTS mechanism will not be enabled. The AP sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission.
Beacon Interval	The Beacon Interval value indicates the frequency interval of the beacon. Enter a value between 20 and 1024. A beacon is a packet broadcast by the router to synchronize the wireless network. The default is 100.
Preamble Type	The Preamble Type defines the length of the CRC (Cyclic Redundancy Check) block for communication between the AP and mobile wireless stations. Make sure to select the appropriate preamble type. Note that high network traffic areas should use the <i>short preamble</i> type. CRC is a common technique for detecting data transmission errors.
IAPP	The IEEE 802.11F or Inter-Access Point Protocol (IAPP) is a recommendation that describes an optional extension to IEEE 802.11 that provides wireless

	access-point communications among multivendor systems.
Protection	Prevent from interference of 11b device.
Aggregation	Aggregating data unit. It can improve some transmission efficiency.
Short GI	Short guard interval. Short GI can improve transmission data rate
WLAN Partition	Isolate each WLAN client.
20/40MHz Coexist	20MHz and 40MHz will be coexist if enabled.
RF Output Power	RF Output power level 100%, 70%, 50%, 35%,15%

Function buttons in this page:

Apply Changes

Change the settings. New parameters will take effect after save into flash memory and please reboot device.

3.7.1.4 Security

This screen allows you to setup the wireless security. Turn on WEP or WPA by using encryption keys could prevent any unauthorized access to your WLAN.



Fields in this page:

Field	Description
Encryption	<p>There are 4 types of security to be selected. To secure your WLAN, it's strongly recommended to enable this feature.</p> <p>WEP: Make sure that all wireless devices on your network are using the same encryption level and key. Click <i>Set WEP Key</i> button to set the encryption key.</p> <p>WPA: WPA uses Advanced Encryption Standard (AES) for data encryption. AES utilized a symmetric 128-bit block data encryption.</p> <p>WPA2: WPA2, also known as 802.11i, uses Advanced Encryption Standard (AES) for data encryption. AES utilized a symmetric 128-bit block data encryption.</p> <p>WAP Mixed: The AP supports WPA (TKIP) and WPA2 (AES) for data encryption. The actual selection of the encryption methods will depend on the clients.</p>
Authentication Mode	<p>Personal (Pre-Shared Key): Pre-Shared Key authentication is based on a shared secret that is known only by the parties involved. To use WPA Pre-Shared Key, select key format and enter a password in the "Pre-Shared Key Format" and "Pre-Shared Key" setting respectively. Please refer to "Pre-Shared Key Format" and "Pre-Shared Key" setting below.</p>
Pre-Shared Key Format	<p>PassPhrase: Select this to enter the Pre-Shared Key secret as user-friendly textual secret.</p> <p>Hex (64 characters): Select this to enter the Pre-Shared Key secret as hexadecimal secret.</p>
Pre-Shared Key	<p>Specify the shared secret used by this Pre-Shared Key. If the "Pre-Shared Key Format" is specified as <i>PassPhrase</i>, then it indicates a passphrase of 8 to 63 bytes long; or if the "Pre-Shared Key Format" is specified as <i>PassPhrase</i>, then it indicates a 64-hexadecimal number.</p>

Function buttons in this page:

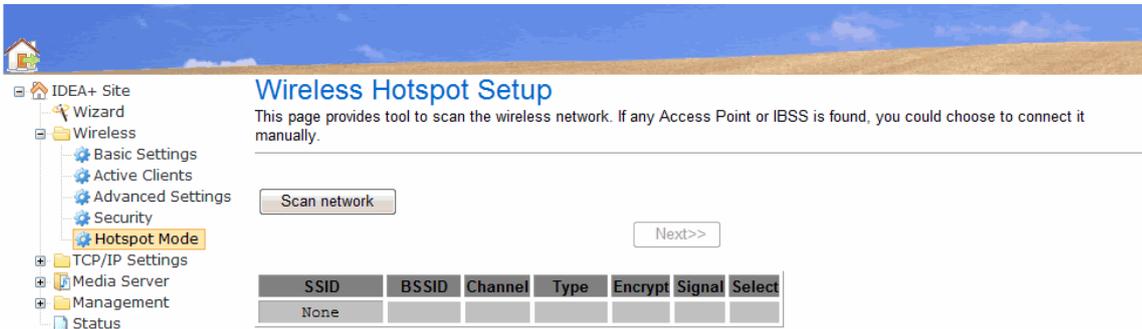
Apply Changes

Change the settings. New parameters will take effect after save into flash memory and please reboot the device.

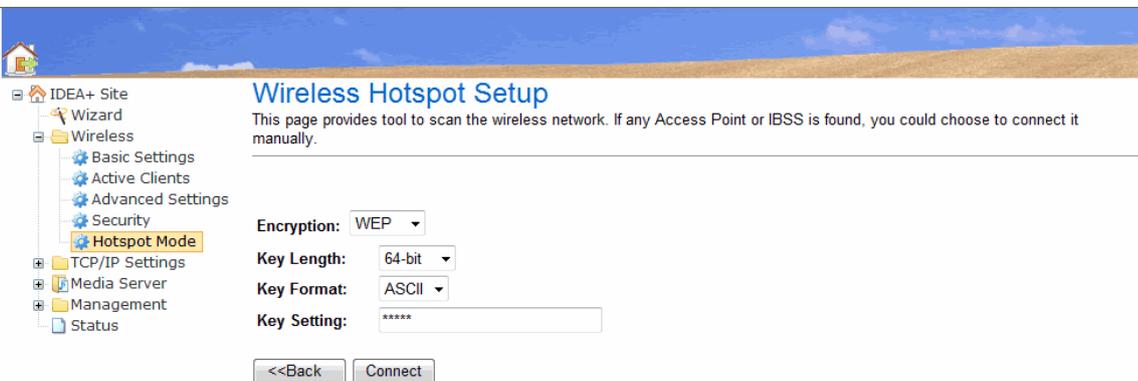
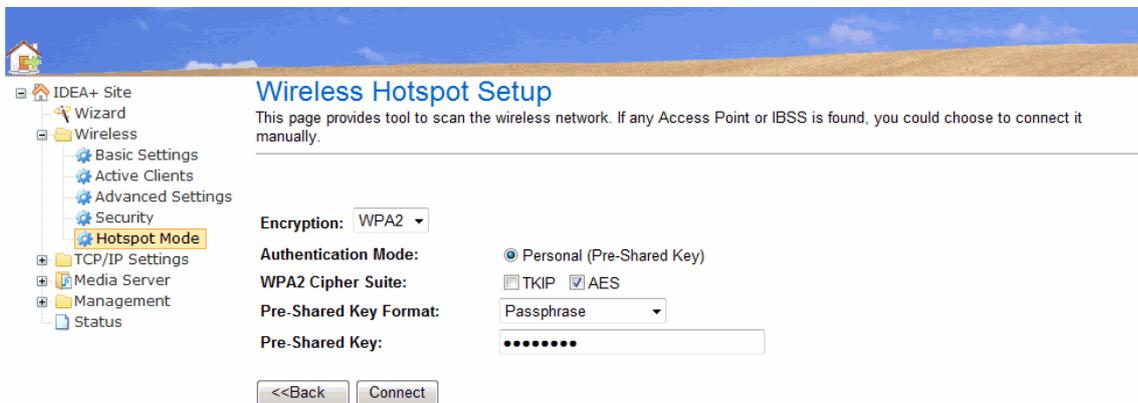
3.7.1.5 Hotspot Mode

To configure iDEA+ Docking Station to Hotspot mode:

1. Click “Scan network” button and select a root AP to connect. Click Connect button to continue.



2. Select Encryption and key of the root AP and click “Finished” button to save the settings.



3.7.2 TCP/IP Settings

There are two sub-menus for TCP/IP Settings: [LAN Interface] and [WAN Interface].

3.7.2.1 LAN Interface

This page is used to configure the parameters for local area network which connects to the iDEA⁺ Docking Station. Here you may change the setting for IP address, subnet mask, DHCP, etc..

LAN Interface Setup

This page is used to configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet mask, DHCP, etc..

IP Address:

Subnet Mask:

Default Gateway:

DHCP:

DHCP Client Range: -

DHCP Lease Time: (1 ~ 10080 minutes)

Static DHCP:

Domain Name:

802.1d Spanning Tree:

Fields in this page:

Field	Description
IP Address	The LAN IP address of iDEA ⁺ Docking Station
Subnet Mask	LAN subnet mask.
Default Gateway	The default gateway is the routing device used to forward all traffic that is not addressed to a station within the local subnet.
DHCP	Disabled, Client, Server mode.
DHCP Client Range	Specify the lowest and highest addresses in the range.
Static DHCP	Choose Enable to enable static DHCP.
Domain Name	Domain name to be registered with the DNS server.
802.1d Spanning Tree	Enable/Disable 802.1d Spanning Tree. Default is Disabled.

Function buttons for this setting block:

- **Show Client**
Click to show the DHCP clients.
- **Set Static DHCP**
Click to set static DHCP.
- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

Static DHCP Setup

Static DHCP Setup

This page allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.

Enable Static DHCP

IP Address:

MAC Address:

Comment:

Static DHCP List:

IP Address	MAC Address	Comment	Select
------------	-------------	---------	--------

Fields in this page:

Field	Description
IP Address	The IP address of your PC.
MAC Address	The MAC address of NIC in your PC.
Comment	Fill in the comment

Function buttons for this setting block:

- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

The Static DHCP List lists the IP Address and MAC addresses of PC which are with Static IP Address. You can select the entries at the Select column and apply to the following function buttons.

Function buttons for the **Static DHCP List**:

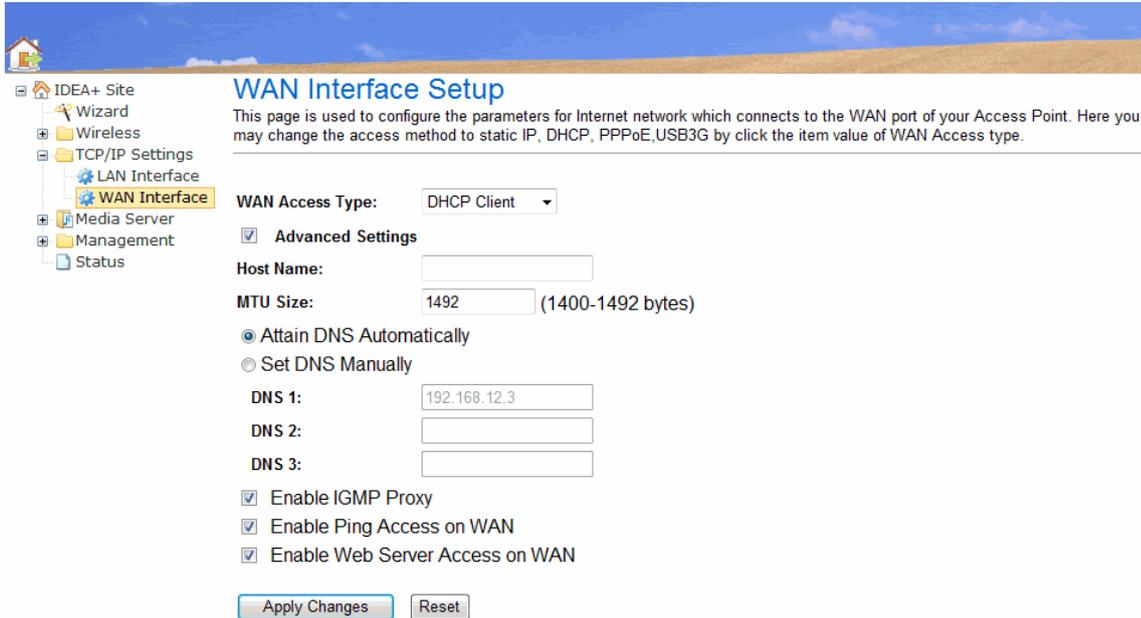
- **Delete Selected**
Delete the selected entries from the list.
- **Delete All**
Flush the list.
- **Reset**
Click to abort change and recover the previous configuration.

3.7.2.2 WAN Interface

This page is used to configure the parameters for Internet network which connects to the WAN port or USB port of your iDEA⁺ Docking Station. Here you may change the access method to static IP, DHCP, PPPoE, USB3G or Android Mobile by click the item value of WAN Access type.

3.7.2.2.1 DHCP Client

By default, the Configuration Type is set to DHCP Client, and it should be kept only if your ISP supports DHCP or you are connecting through a dynamic IP address.



Fields in this page:

Field	Description
WAN Access Type	Choose DHCP Client mode
Host Name	Host Name of the device
MTU Size	Maximum Transmission Unit. Default is 1492 bytes.
Attain DNS Automatically	Click to get DNS server IP address from DHCP server.
Set DNS Manually	Click to set DNS server IP address manually.
DNS1	Primary DNS Server IP Address.
DNS2	Secondary DNS Server IP Address.
DNS3	Third DNS Server IP Address.
Enable IGMP Proxy	Click to enable IGMP Proxy.
Enable Ping Access on WAN	Click to enable Ping access on WAN.
Enable Web Server Access on WAN	Click to enable Web remote management from WAN.

Function buttons for this setting block:

- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

3.7.2.2.2 Static IP

If you are required to use a permanent IP address to connect to the Internet, then select **Static IP**.

WAN Interface Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, USB3G by click the item value of WAN Access type.

WAN Access Type:

Advanced Settings

IP Address:

Subnet Mask:

Default Gateway:

MTU Size: (1400-1500 bytes)

DNS 1:

DNS 2:

DNS 3:

Enable IGMP Proxy

Enable Ping Access on WAN

Enable Web Server Access on WAN

Fields in this page:

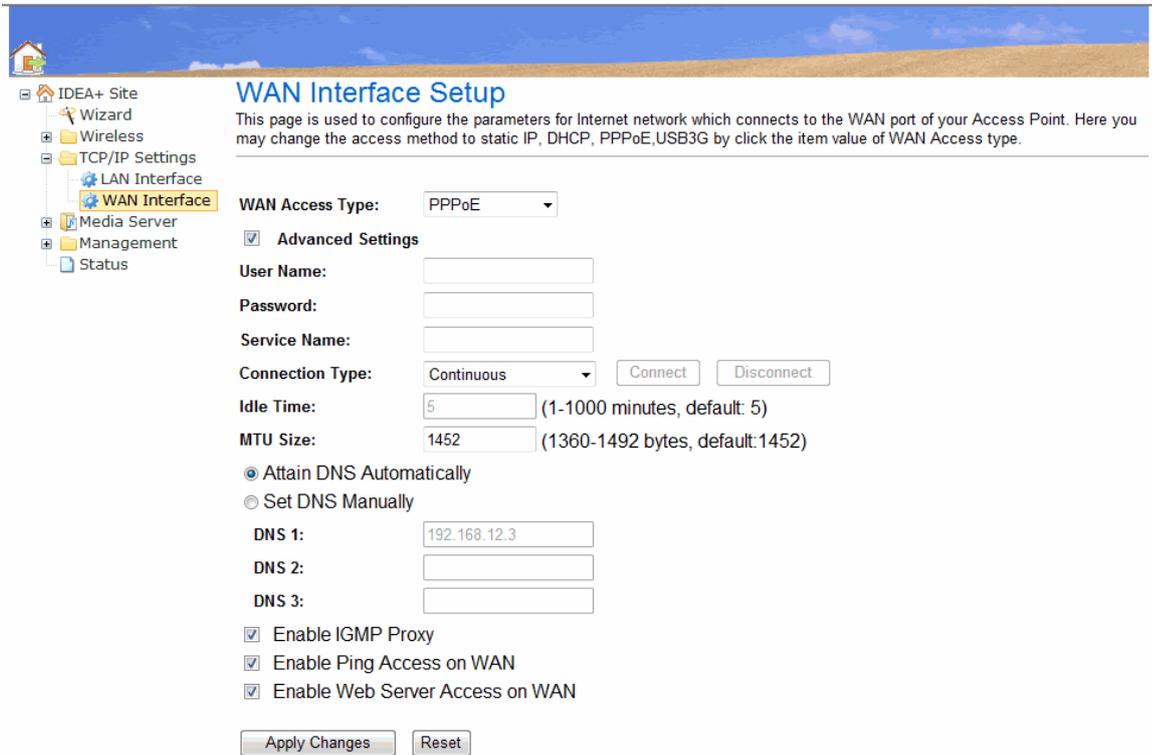
Field	Description
WAN Access Type	Choose Static IP mode
IP Address	Fill in Static IP Address provided by ISP.
Subnet Mask	Fill in Subnet Mask provided by ISP.
Default Gateway	Fill in Default Gateway IP Address provided by ISP.
MTU Size	Fill in MTU size. Default is 1500 bytes.
DNS1	Primary DNS Server IP Address.
DNS2	Secondary DNS Server IP Address.
DNS3	Third DNS Server IP Address.
Enable IGMP Proxy	Click to enable IGMP Proxy.
Enable Ping Access on WAN	Click to enable Ping access on WAN.
Enable Web Server Access on WAN	Click to enable Web remote management from WAN.

Function buttons for this setting block:

- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

3.7.2.2.3 PPPoE

PPPoE: When **PPPoE Mode** is selected from the WAN Access Type drop down manual, the following screen display. Point-to-Point Protocol (PPP) is a method of establishing a network connection between network hosts. PPPoE, also known as RFC 2516, adapts PPP to work over Ethernet. PPPoE provides a mechanism for authenticating users by providing User Name and Password fields and it is a connection type provided by many ISP or Telecom.



Fields in this page:

Field	Description
WAN Access Type	Choose PPPoE mode
User Name	Your ISP Account ID. Check your ISP for details.
Password	Your ISP Account Password. Check your ISP for details.
Service Name	Your ISP Service Name. Check your ISP for details.
Connection Type	There are Continuous, connect on Demand and Manual in connection type.
Idle Time	Specifies that PPPoE connection should disconnect if the link has no activity detected for n minutes. This field is used in conjunction with the On-Demand feature and is enabled in connection type. To ensure that the link is always active, enter a 0 in this field.
MTU Size	Maximum Transmission Unit. The largest size packet that can be sent by the modem. If the network stack of any packet is larger than the MTU value, then the packet will be fragmented before the transmission. Default is 1452 bytes.
Attain DNS Automatically	Attain DNS server IP address from ISP automatically.

Set DNS Manually	Setup DNS server IP address manually.
DNS1	Primary DNS Server IP Address.
DNS2	Secondary DNS Server IP Address.
DNS3	Third DNS Server IP Address.
Enable IGMP Proxy	Click to enable IGMP Proxy.
Enable Ping Access on WAN	Click to enable Ping access on WAN.
Enable Web Server Access on WAN	Click to enable Web remote management from WAN.

Function buttons for this setting block:

- **Connect**
Click to connect ISP. It is available when you choose manual in connection type.
- **Disconnect**
Click to disconnect ISP. It is available when you choose manual in connection type.
- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

3.7.2.2.4 USB3G

Connect your 3G USB card to the USB port of iDEA⁺ Docking Station. You can share 3G Internet connection among other Wi-Fi available devices.

WAN Interface Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, USB3G by click the item value of WAN Access type.

WAN Access Type: USB3G

Advanced Settings

User Name:

Password:

PIN:

APN: internet

Dial Number: *99#

Connection Type: Continuous

Idle Time: 5 (1-1000 minutes)

MTU Size: 1490 (1420-1490 bytes)

Attain DNS Automatically
 Set DNS Manually

DNS 1: 192.168.12.3

DNS 2:

DNS 3:

Enable IGMP Proxy
 Enable Ping Access on WAN
 Enable Web Server Access on WAN

Fields in this page:

Field	Description
WAN Access Type	Choose USB3G mode
User Name	ISP Account ID. Check your ISP for details.
Password	ISP Account Password. Check your ISP for details.
PIN	Person Identification Number.
APN	Enter APN string provided by ISP.
Dial Number	Enter Dial Number provided by ISP.
Connection Type	There are Continuous, connect on Demand and Manual in connection type.
Idle Time	Specifies that connection should disconnect if the link has no activity detected for n minutes. This field is used in conjunction with the On-Demand feature and is enabled in connection type. To ensure that the link is always active, enter a 0 in this field.
MTU Size	Fill in MTU size. Default is 1490 bytes.
Attain DNS Automatically	Attain DNS server IP address from ISP automatically.
Set DNS Manually	Setup DNS server IP address manually.
DNS1	Primary DNS Server IP Address.

DNS2	Secondary DNS Server IP Address.
DNS3	Third DNS Server IP Address.
Enable IGMP Proxy	Click to enable IGMP Proxy.
Enable Ping Access on WAN	Click to enable Ping access on WAN.
Enable Web Server Access on WAN	Click to enable Web remote management from WAN.

Function buttons for this setting block:

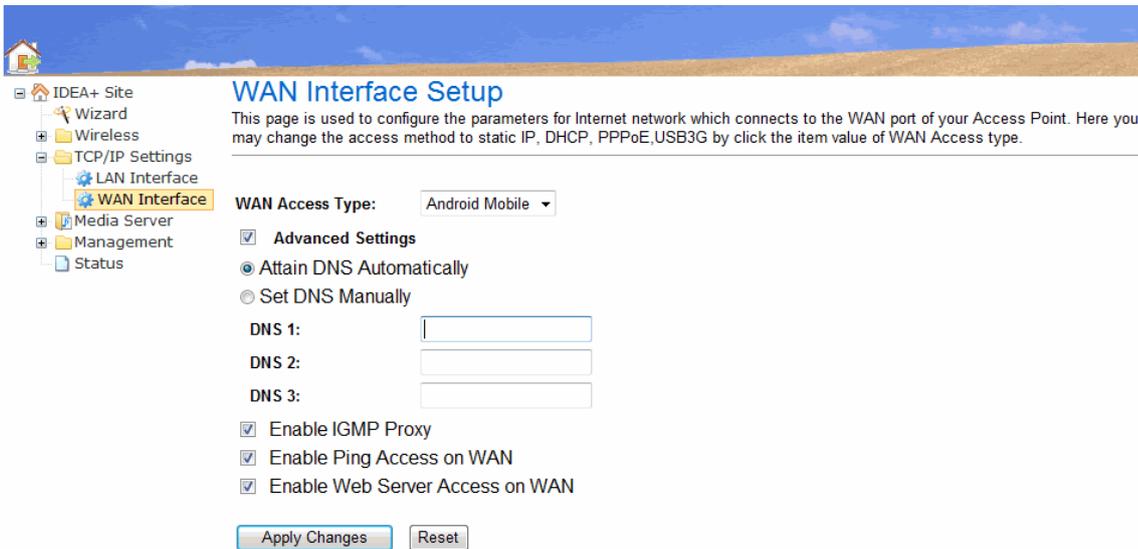
- **Connect**
Click to connect ISP. It is available when you choose manual in connection type.
- **Disconnect**
Click to disconnect ISP. It is available when you choose manual in connection type.
- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

3.7.2.2.5 Android Mobile

Share your Android phone's data connection via USB. Use the USB cable that come with your phone to connect your phone to the USB port of iDEA+ Docking Station.

Change the configuration on Android Phone:

1. Press **Home**, press **Menu** and touch **Settings** to open the Settings application
2. Touch Wireless & networks > Tethering & portable hotspot.
3. Check USB Tethering: The phone starts sharing its mobile network data connection with your iDEA+ Docking Station via USB connection. An ongoing notification is added to the Status bar and Notifications panel.



Fields in this page:

Field	Description
WAN Access Type	Choose Android Mobile mode
Attain DNS Automatically	Attain DNS server IP address from ISP automatically.
Set DNS Manually	Setup DNS server IP address manually.
DNS1	Primary DNS Server IP Address.
DNS2	Secondary DNS Server IP Address.
DNS3	Third DNS Server IP Address.
Enable IGMP Proxy	Click to enable IGMP Proxy.
Enable Ping Access on WAN	Click to enable Ping access on WAN.
Enable Web Server Access on WAN	Click to enable Web remote management from WAN.

Function buttons for this setting block:

- **Apply Changes**
Click to apply the new configuration.
- **Reset**
Click to abort change and recover the previous configuration.

3.8 Management

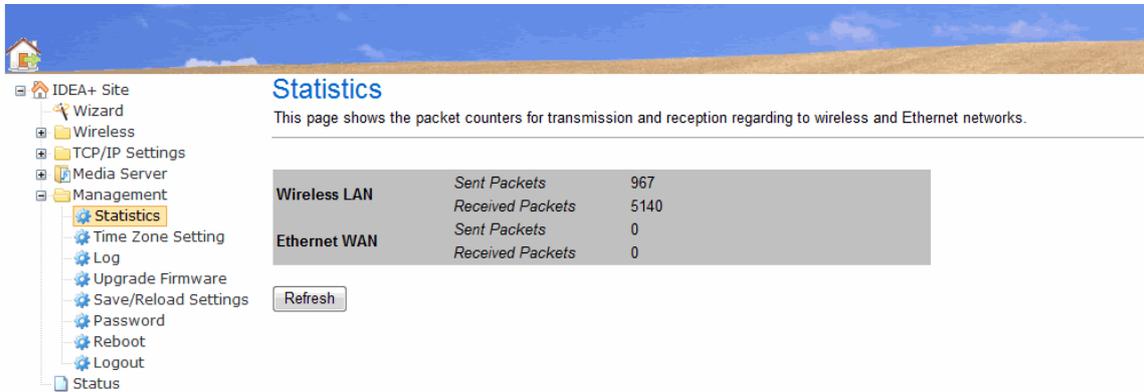
The **Management** page allows you to manage your iDEA⁺ Docking Station.

You can view Management link in the left navigation bar. Following are the options available under Management:

- Statistics
- Time Zone Setting
- Log
- Upgrade Firmware
- Save/Reload Settings
- Password
- Reboot
- Logout

3.8.1 Statistics

This page shows the packet counters for transmission and reception regarding to Wireless LAN and Ethernet WAN networks.

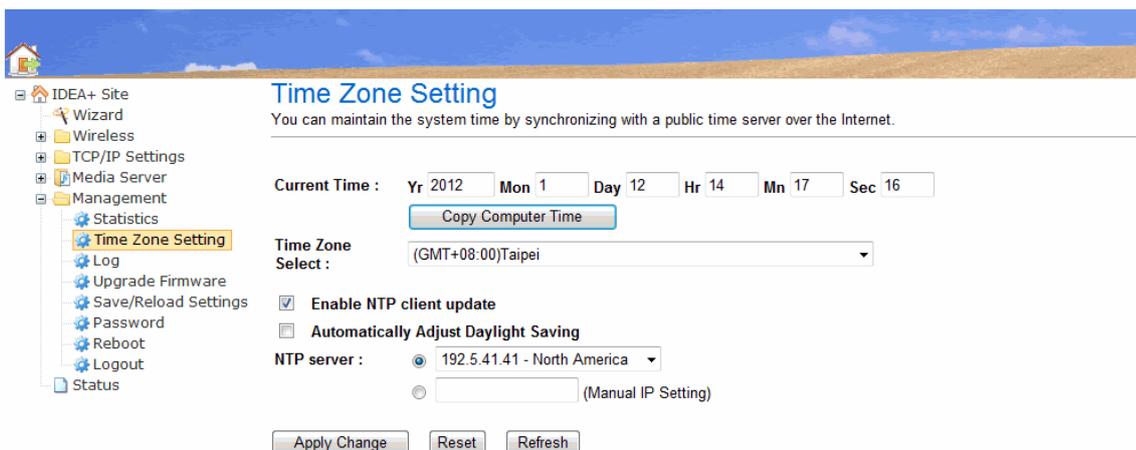


Statistics
This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.

Wireless LAN	<i>Sent Packets</i>	967
	<i>Received Packets</i>	5140
Ethernet WAN	<i>Sent Packets</i>	0
	<i>Received Packets</i>	0

3.8.2 Time Zone Setting

You can maintain the system time by synchronizing with a public time server over the Internet.



Fields in this page:

Field	Description
Current Time	The current time of the specified time zone. You can set the current time by yourself or configured by SNTP.
Time Zone Select	The time zone in which the DSL device resides.
Enable NTP client update	Enable the NTP client to update the system clock.
Automatically Adjust Daylight Saving	Check to Automatically Adjust Daylight Saving.
NTP server	The IP address of the NTP server. You can select from the list or set it manually.

Function buttons for this setting block:

Apply Changes

Click to apply the new configuration.

Reset

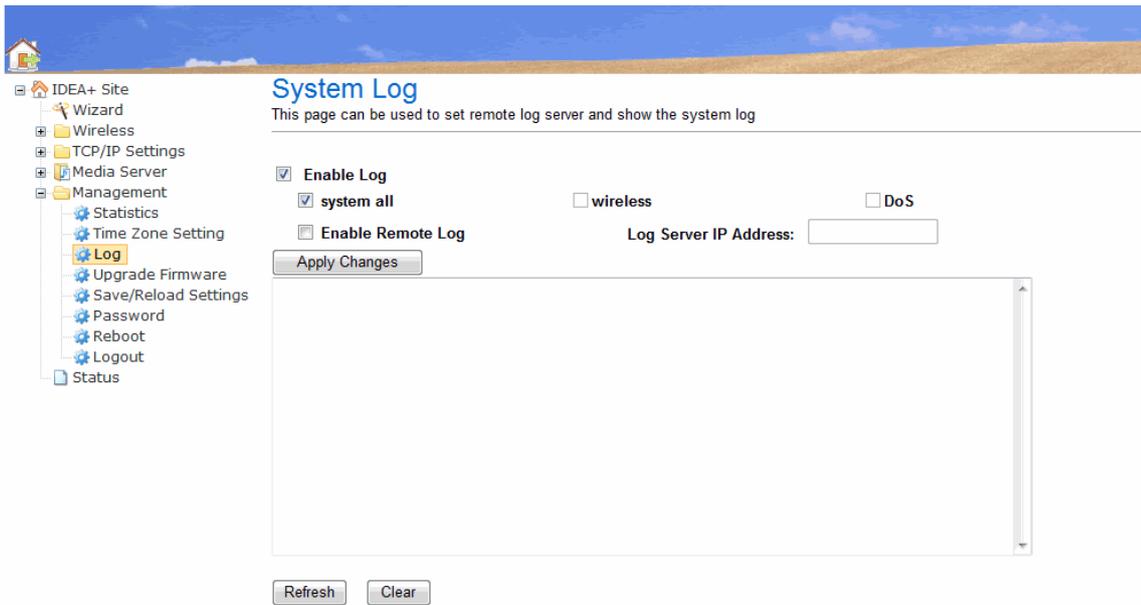
Click to abort change and recover the previous configuration.

Refresh

Click to refresh the configuration.

3.8.3 Log

This page can be used to set remote log server and show the system log.



Fields in this page:

Field	Description
Enable Log	Check to enable Log.
System all	Check to enable log of system all.
Wireless	Check to enable log of Wireless.
DoS	Check to enable log of DoS.
Enable Remote Log	Check to enable remote log.
Log Server IP Address	Fill in the IP address of Log server.

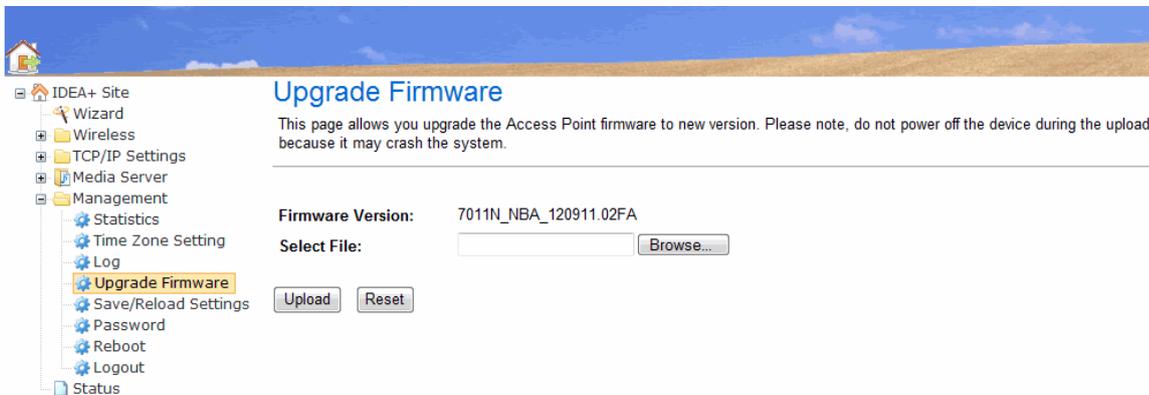
Function buttons for this setting block:

Apply Changes

Click to apply the new configuration.

3.8.4 Upgrade Firmware

This page allows you upgrade the firmware to new version. Please note, do not power off the device during the upload because it may crash the system.



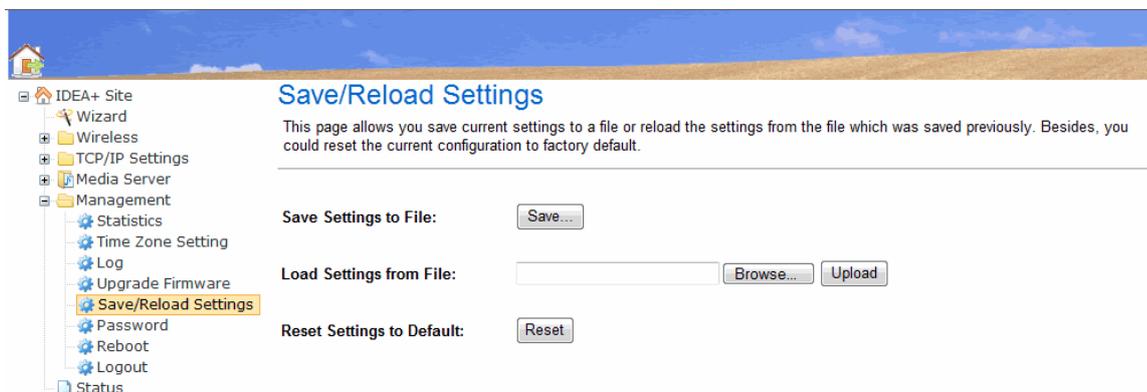
To upgrade the firmware for the device:

- Click the **Browse** button to select the firmware file.
- Confirm your selection.
- Click the **Upload** button to start upgrading.

IMPORTANT! Do not turn off your device or press the Reset button while this procedure is in progress.

3.8.5 Save/Reload Setting

This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.



Function button for this first setting block:

Save

Click to save the setting to a file.

Upload

To load the setting for the iDEA⁺ Docking Station:

- Click the **Browse** button to select the setting file.
- Confirm your selection.
- Click the **Upload** button to start uploading.

Reset

Click to reset settings to default. The iDEA⁺ Docking Station will reboot.

3.8.6 Password

This page is used to set the account to access the web server of iDEA⁺ Docking Station. Empty user name and password will disable the protection.

Password Setup

This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.

User Name:

New Password:

Confirmed Password:

Fields in this page:

Field	Description
User Name	Fill in new username for login.
New Password	Fill in new password for login.
Confirmed Password	Fill in new password again to confirm.

Function buttons for this setting block:

Apply Changes

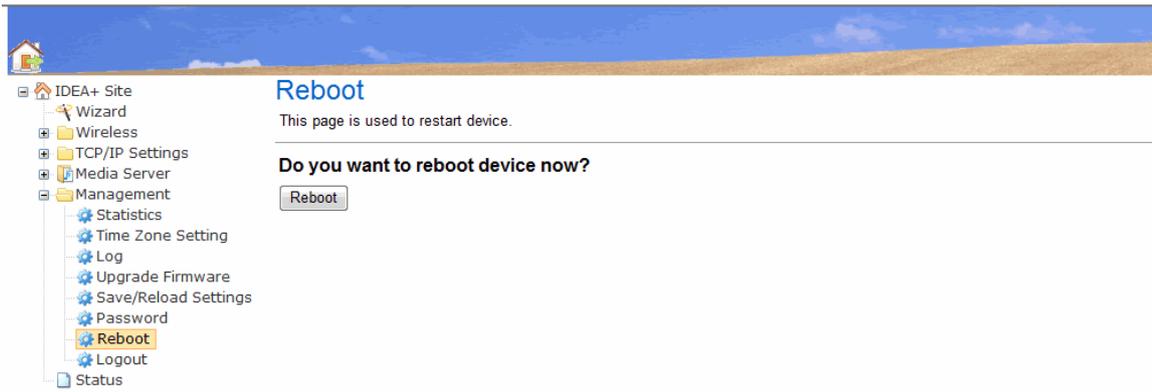
Click to apply the new configuration.

Reset

Click to abort change and recover the previous configuration.

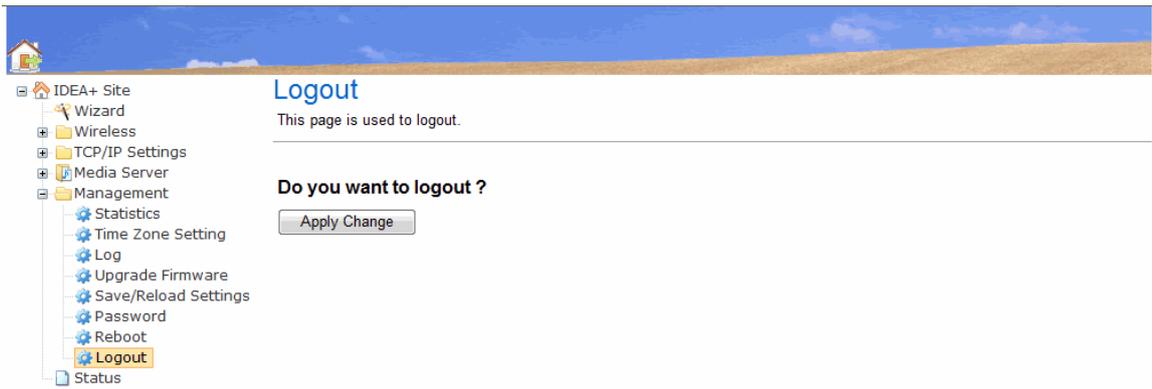
3.8.7 Reboot

This page is used to reboot iDEA⁺ Docking Station.



3.8.8 Logout

This page is used to logout iDEA+ Docking Station.



Chapter 4 Configuration via Smart Phone

Please enter Wi-Fi Settings of your smart phone and connect to the iDEA⁺ Docking Station first.

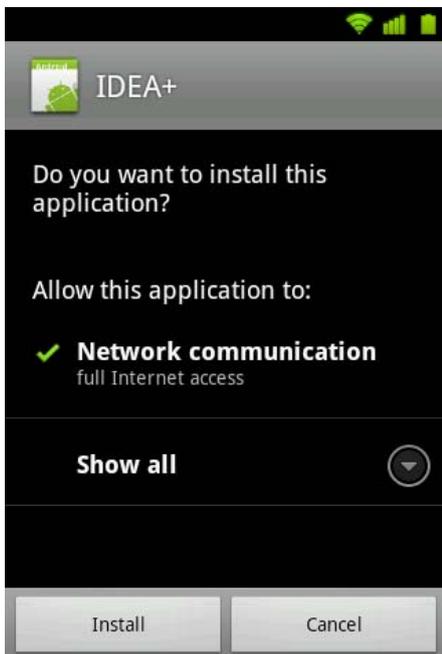
4.1 Install APPs for Android Phone

Install the Android APP to configure iDEA⁺ Docking Station using Android Phone.

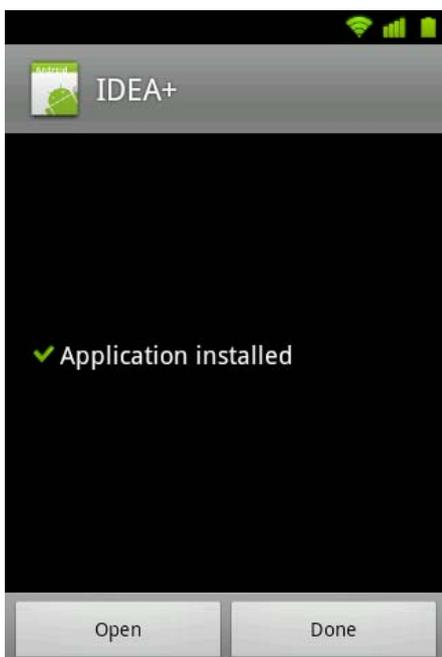
Before you touch the iDEA⁺ APK, please make sure that your Android phone is already connected to iDEA⁺ Docking Station via Wi-Fi.

Touch **IDEAPlus.apk** to install the iDEA⁺ Docking Station application.

1. Touch **Install** to install the application.



2. Touch Open to open the status page of iDEA⁺ Docking Station.



3. Please fill in username and password to login iDEA+ Docking Station.



4. Here is the status page.



4.2 Setting

For Smart Phone user, launch web browser, and enter the iDEA⁺ Docking Station's IP Address:

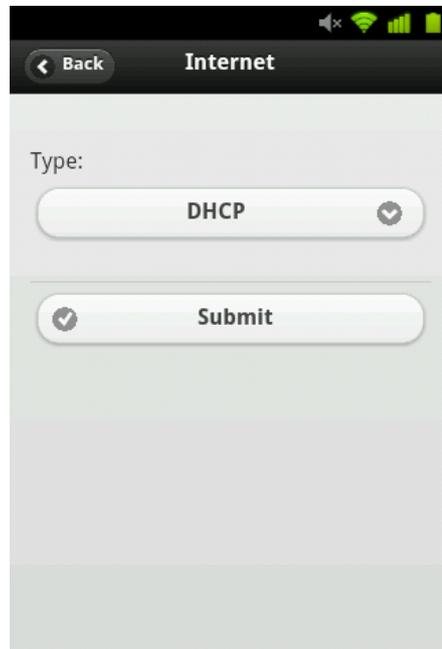
“192.168.168.1” and enter the default User name: **“admin”** and **Password: “admin”**

4.2.1 Gateway Mode

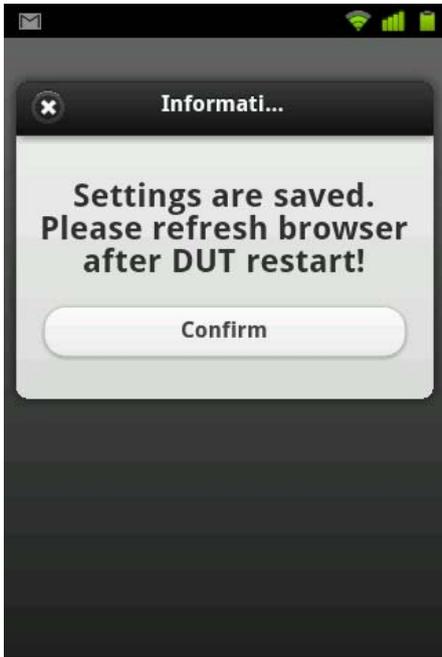
1. Touch Setting->Internet.



2. Touch Choose and select DHCP. Touch “Submit” to continue setting.



3. Settings are saved. Touch Confirm to exit.

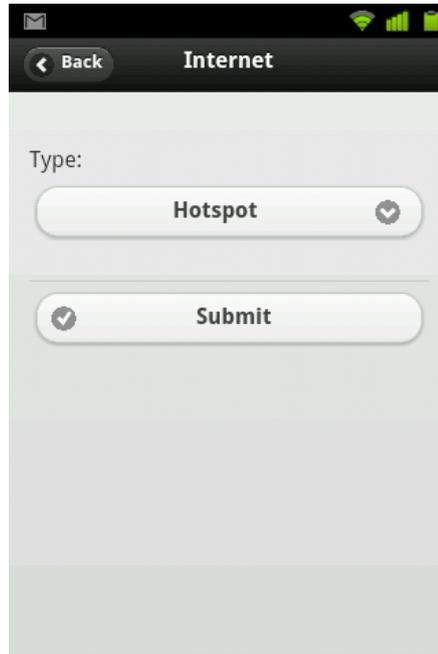


4.2.2 Hotspot Mode

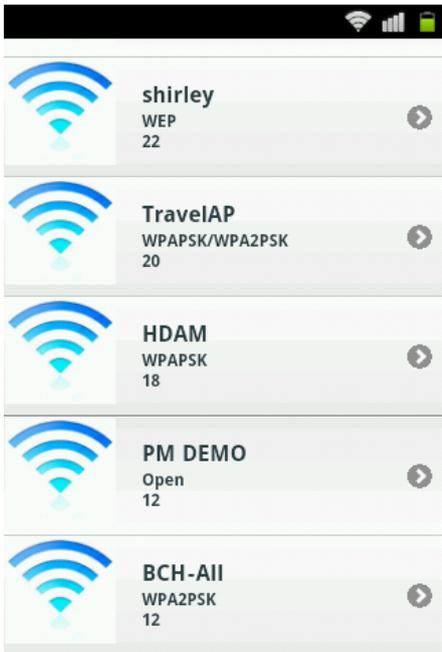
1. Touch Setting -> Internet.



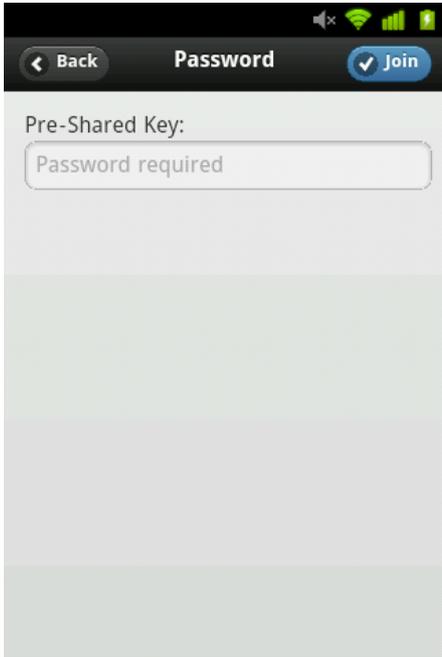
2. Touch Choose and select Hotspot. Touch "Submit" to continue setting.



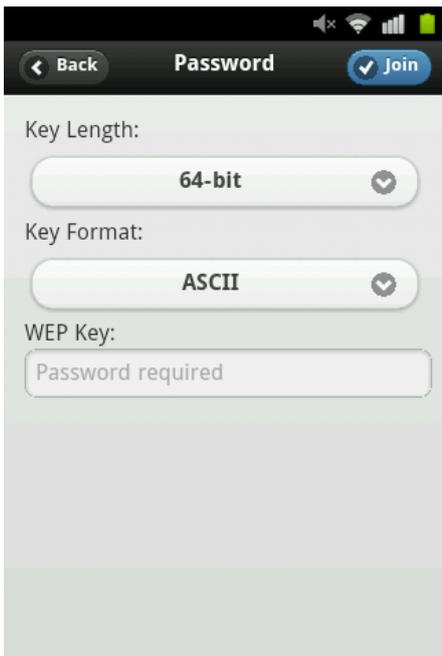
3. It will list the Wireless AP for you to connect. Touch an AP to connect.



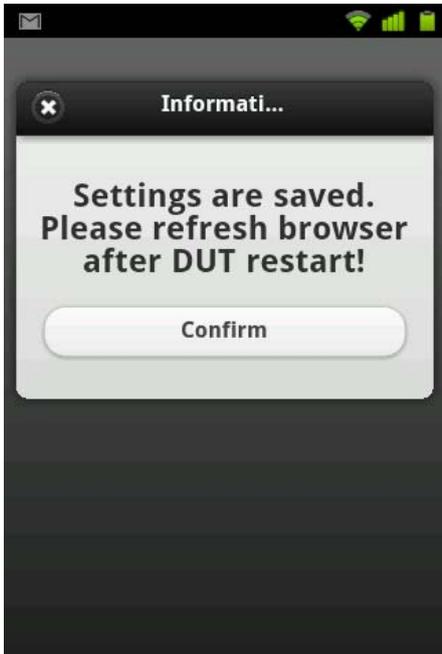
4. When AP's encryption is WPA/WPA2, enter the pre-shared key of the wireless AP. Touch "Join" to continue.



5. When AP's encryption is WEP, choose Key Length, Key Format and enter the WEP key of the wireless AP. Touch "Join" to continue.



6. Settings are saved. Touch Confirm to exit.



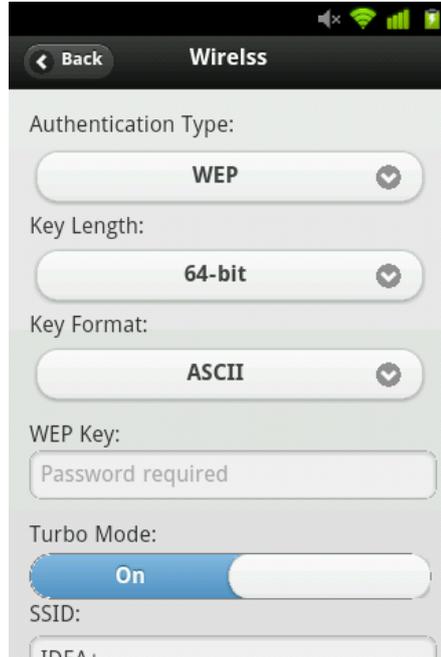
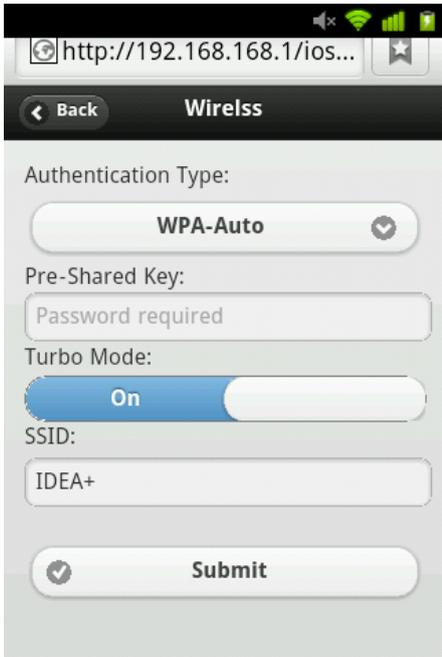
4.2.3 Wireless Setting

It is only to change the wireless setting of the iDEA⁺ Docking Station.

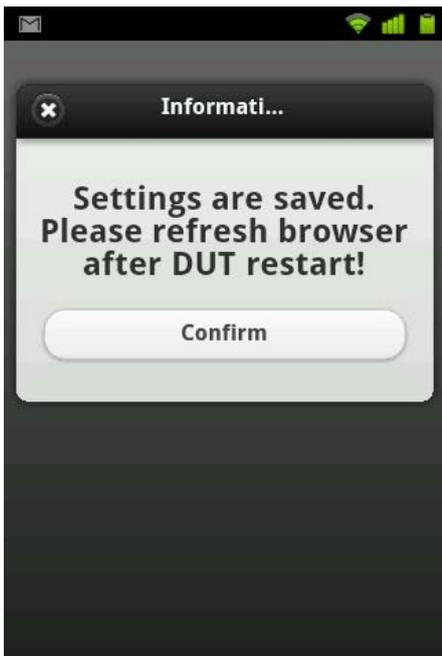
1. Touch Setting->Wireless



2. In Authentication Type, choose "Open", "WEP", or "WPA-Auto". Fill in the Pre-Shared Key when the Authentication Type is WPA-Auto. Fill in the WEP key when the Authentication Type is WEP. You can turn on Turbo mode and the channel width will be 40MHz. Fill in the SSID. Touch Submit to confirm the setting.



3. Settings are saved. Touch Confirm to exit.

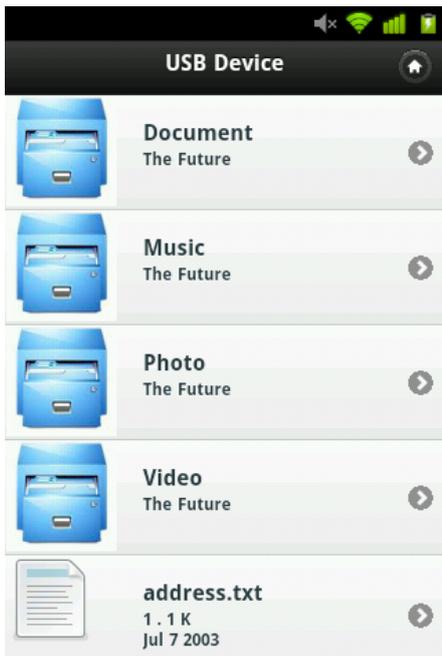


4.3 Access USB Device

Touch USB Device



It will show the directory and file in the USB HDD or Flash Drive. Touch the video or music which you want to playback.



Appendix A: Troubleshooting

iDEA⁺ Docking Station doesn't respond

- Power ON iDEA⁺ Docking Station
- If that doesn't work, check if the power plug is connected to outlet.

Wi-Fi devices cannot connect with iDEA⁺ Docking Station

- Verify the network configuration of Wi-Fi devices.
- Verify the wireless security key.
- Verify if the Wi-Fi devices is too far to connect with iDEA⁺ Docking Station.

The throughput is slow

- Avoid placing the iDEA⁺ Docking Station near the metal objects
- Change the wireless channel.

Cannot access iDEA⁺ Docking Station webpage

- Check the IP address of your Wi-Fi client if it is in the same network domain as iDEA⁺ Docking Station.
- Press reset button to reset iDEA⁺ Docking Station to default.