



U-MEDIA Communications, Inc.

2.4GHz Wireless 802.11n Bridge

Model: WST-375L

User's Guide

Version	Date	Description
01	11/07/2008	Draft rev. 01



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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

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

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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 interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The



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firmware setting is not accessible by the end user.

Country Code Statement

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

European Union Notice:

Radio products with the CE marking comply with the R&TTE Directive (1999/5/EC), the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN 60950 Product Safety
- EN 300 328 Technical requirement for radio equipment
- EN 301 489-1/-17 General EMC requirements for radio equipment

Trademark recognition

All product names used in this manual are the properties of their respective owners and are acknowledged.



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1. Getting Started with the WST-375L

Congratulations on purchasing the WST-375L! This manual provides information for setting up and configuring the WST-375L. This manual is intended for both home users and professionals.

1.1. Package Contents

- WST-375L 2.4GHz Wireless 802.11n(DRAFT) Bridge
- CD-ROM (User's Guide)
- Multi-Language Quick Installation Guide
- CAT-5 Ethernet Cable
- Power Adapter (12V, 0.5A)



NOTE

Using a power supply with a different voltage than the one included with your product will cause damage and void the warranty for this product.

1.2. Minimum System Requirements

Installation Requirements

- Web Browser: Internet Explorer (6 or higher) Mozilla or Safari.
- A computer with a network adapter or wireless adapter properly installed.
- CD-ROM drive
- A router with an available network LAN port.
- A RJ-45 network cable.

Proprietary and Confidential



2. Introduction

The WST-375L 2.4GHz Wireless 802.11n(DRAFT) Bridge is an high-performance, supports high-speed wireless networking at home, at work or in public places.

Unlike most routers, the WST-375L provides data transfers at up to 300Mbps in 11n receiving mode. This bridge is also back compatible with 802.11g or 11b devices. This means that you do not need to change your entire network to maintain connectivity. You may sacrifice some of 11n's speed when you mix 11n and 11b/g devices, but you will not lose the ability to communicate when you incorporate the 11n standard into your 11b/g network. You may choose to slowly change your network by gradually replacing the 11b/g devices with 11n devices.

2.1. Features

- Compact form factor design
- Affordable 11n product for easily migrating current 11b/g network to 11n network with higher data rate benefit
- Supports IEEE 802.11n (draft 2.0) & 11b/g 2.4GHz wireless Local Area Network (WLAN) application
- 2.412~2.472GHz frequency band operation
- Compliant with IEEE 802.3 & 3u standards
- Support OFDM and CCK modulation
- Delivers data rate up to 300 Mbps in 11n receiving mode.
- Support one LAN port
- Support WEP & WPA security
- Support two printed antennas

3. Hardware Overview



3.1. LED Indications



WPS	Blue on: WPS success Blue Blinking : WPS in progress Orange Blinking: WPS error
Wireless	Blue: ON, wireless linked Blue: Blinking, wireless traffic activity
Reserve	
LAN	Blue: OFF, Link failed, or not linked Blue: ON, 10/100M linked Blue: Blinking, 10/100M traffic activity
PWR	Blue: ON, while power on



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3.2. Rear Panel



Power Jack	DC input
LAN Port	10/100Mbps

3.3 Top View



WPS Button	Trigger WPS process
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3.4 Bottom View



Reset Button	Reset to factory default setting
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3.3 Installation Considerations

The TEW-638APB AP lets you access your network, using a wireless connection, from virtually anywhere within its operating range. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the WST-375L and other network devices to a minimum - each wall or ceiling can reduce your wireless product's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building Materials can impede the wireless signal - a solid metal door or aluminum studs may have a negative effect on range. Try to position wireless devices and computers with wireless adapters so that the signal passes through drywall or open doorways and not other materials.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate extreme RF noise.



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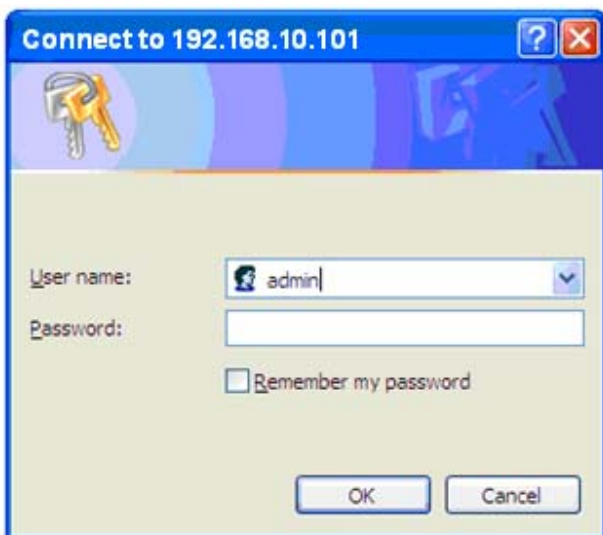
3.4 Getting Start

- 1 You will need broadband Internet access (a Cable or DSL-subscriber line into your home or office)
- 2 Consult with your Cable or DSL provider for proper installation of the modem.
- 3 Connect the Cable or DSL modem to the WRT-390L Wireless Broadband Router (WAN port).
- 4 Ethernet LAN ports of the WRT-390L are Auto MDI/MDIX and will work with both Straight-Through and Cross-Over cable.

4. Using the Configuration Menu

Whenever you want to configure your WST-375L, you can access the Configuration Menu through your PC by opening the Web-browser and typing in the IP Address of the WST-375L. The WST-375L's default IP Address is `http://192.168.10.101`

- Open the Web browser.
- Type in the IP Address of the Bridge (`http:// 192.168.10.101`)

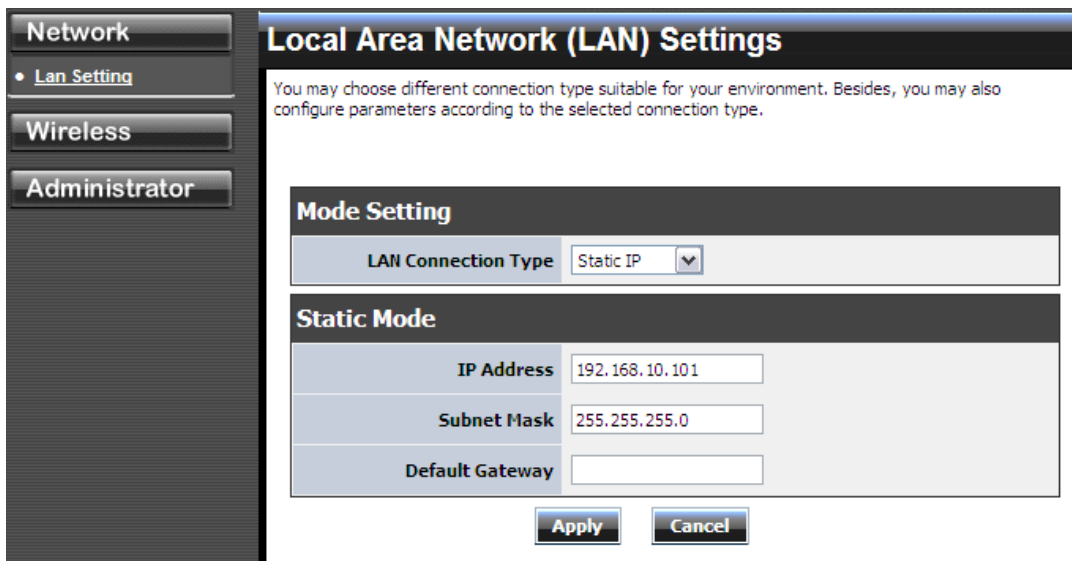


If you have changed the default IP Address assigned to the WST-375L, make sure to enter the correct IP Address.

- Select admin in the User Name field.
- Leave the Password blank.
- Click Login In.

4.1. Network

4.1.1 LAN Setting



Local Area Network (LAN) Settings

You may choose different connection type suitable for your environment. Besides, you may also configure parameters according to the selected connection type.

Mode Setting

LAN Connection Type: Static IP

Static Mode

IP Address: 192.168.10.101

Subnet Mask: 255.255.255.0

Default Gateway:

Apply Cancel

LAN Connection Type

Choose "Static IP (fixed IP)" if your router does not support DHCP or if for any other reason you need to assign a fixed address to the AP. In this case, you must also configure the following fields.

IP Address

The IP address of the AP on the local area network. Assign any unused IP address in the range of IP addresses available for the LAN. For example, 192.168.10.100.

Subnet Mask

The subnet mask of the local area network.

Default Gateway

The IP address of the router on the local area network.

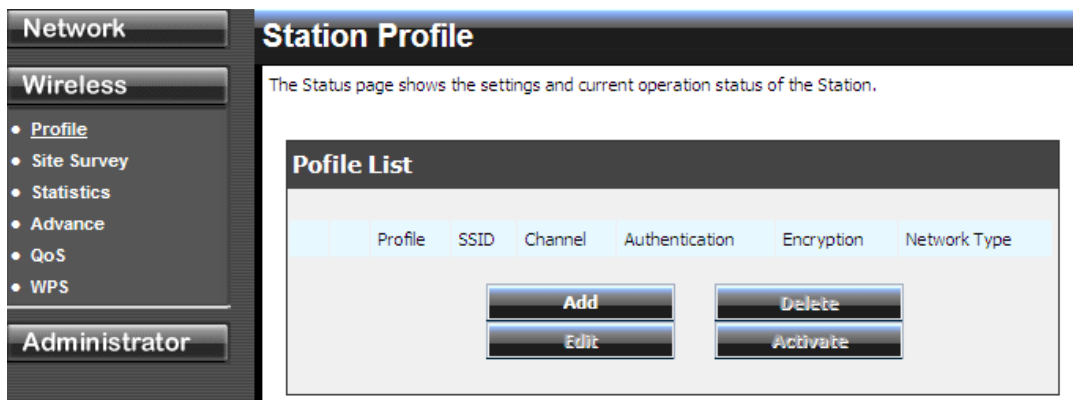
Choose "DHCP (Auto Config)" if your router supports DHCP and you want the router to assign an IP address to the AP.



4.2 Wireless

4.3.1 Profile

Create a custom connection to a specific wireless network. Use this option to make custom profiles and store new profile for later use.



Configure the setting to connect to a wireless network, selection option for network type, SSID, and wireless security. The profile can be edited, deleted and made active from this option.

4.3.2 Site Survey

Use the Site Survey tool to search for wireless networks in the WST-375L area. Click on the Scan button to search for wireless networks to join. From this window, you can also add your profile to use with the WST-375L. Click on the Connect button to join a wireless network from this site survey window.

Station Site Survey

Site survey page shows information of APs nearby. You may choose one of these APs connecting or adding it to profile.

Site Survey

	SSID	BSSID	RSSI	Chan nel	Encrypti on	Authentication	Network Type
<input checked="" type="radio"/>	FRS-305	00-11-E0-10-03-05	39%	1	Not Use	OPEN	Infrastructure
<input type="radio"/>	Belkin_Cheval	00-11-22-33-44-56	55%	2	Not Use	OPEN	Infrastructure
<input type="radio"/>	smcbb	00-03-7F-B6-7E-01	60%	6	TKIP; AES	WPA-PSK; WPA2-PSK	Infrastructure
<input type="radio"/>	TEW672GR-2/2	00-81-74-E0-02-66	81%	6	TKIP; AES	WPA-PSK; WPA2-PSK	Infrastructure
<input type="radio"/>	383-scottie	00-03-7F-B6-7E-04	55%	10	TKIP; AES	WPA-PSK; WPA2-PSK	Infrastructure
<input type="radio"/>		00-81-6C-D0-04-70	100%	11	AES	WPA-PSK; WPA2-PSK	Infrastructure

Connected <-> FRS-305

Connect **Rescan** **Add Profile**



4.3.3 Statistics

View the current operating status of the WST-375L, see the Transmit and Receive data.

The Status page shows the settings and current operation status of the Station.

Transmit Statistics	
Frames Transmitted Successfully	2054
Frames Transmitted Successfully Without Retry	0
Frames Transmitted Successfully After Retry(s)	2054
Frames Fail To Receive ACK After All Retries	111
RTS Frames Successfully Receive CTS	0
RTS Frames Fail To Receive CTS	0
Receive Statistics	
Frames Received Successfully	1866

Receive Statistics	
Frames Received Successfully	0
Frames Received With CRC Error	76367
Frames Dropped Due To Out-of-Resource	0
Duplicate Frames Received	16

[Reset Counters](#)

4.3.4 Advance

Use this setting to adjust the wireless environment.

Network

Wireless

- Profile
- Site Survey
- Statistics
- **Advance**
- QoS
- WPS

Administrator

Station Advanced Configurations

The Status page shows the settings and current operation status of the Station.

Advance Configuration

Wireless Mode(Infra)	2.4GHz 802.11 b/g/n mixed mode
Tx Rate	Auto

HT Physical Mode

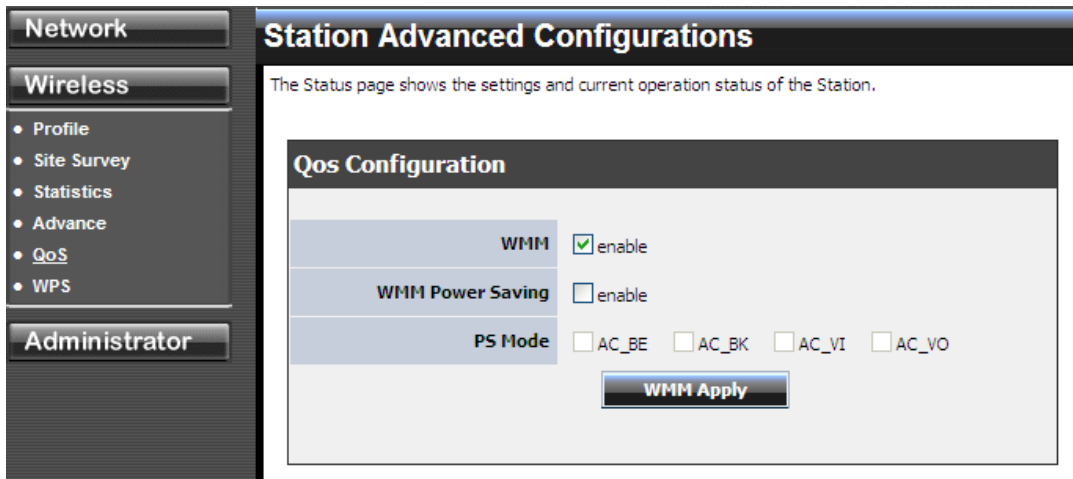
HT Mode	<input checked="" type="radio"/> Mixed Mode <input type="radio"/> Green Field
Channel BandWidth	<input checked="" type="radio"/> 20 <input type="radio"/> Auto
Guard Interval	<input type="radio"/> Long <input checked="" type="radio"/> Auto
MCS	AUTO

11n Configuration

MPDU Aggregation	<input checked="" type="checkbox"/> enable
------------------	--

Apply **RADIO OFF**

4.3.5 QoS



WMM (Wireless Multi-Media)

use this feature allows wireless devices to take advantage of the wireless environment over other wireless devices.

WMM Power Saving

An option that allows wireless clients such as notebooks or Laptops to save battery life by sending less transmission during idle times. Add a check mark to enable this option.

PS Mode

Used for specific application when using WMM Power Saving mode is enabled, use this feature to help with Quality of Service (QoS) settings; these settings are polled by the priority given to the option in this section.

AC_BE=Best Effort

AC_BK=Background

AC_VI=Video

AC_VO=Voice

4.3.6 WPS

You can setup security easily by choosing PIN or PBC method to do Wi-Fi Protected Setup.

Network

Wireless

- Profile
- Site Survey
- Statistics
- Advance
- QoS
- **WPS**

Administrator

Wi-Fi Protected Setup (STA)

You could setup security easily by choosing PIN or PBC method to do Wi-Fi Protected Setup.

WPS AP site survey

No.	SSID	BSSID	RSSI	Ch.	Auth.	Encrypt	Ver.	Status
<input checked="" type="radio"/>	Belkin_Cheval	001122334456	55%	2	OPEN	Not Use	1.0	Conf.
<input type="radio"/>	TEW672GR-2/2	008174E00266	76%	6	Unknown	WEP	1.0	Conf.
<input type="radio"/>	383-scottie	00037FB67E04	55%	10	WPA-PSK; WPA2-PSK	TKIP; AES	1.0	Conf.
<input type="radio"/>		00816CD00470	100%	11	WPA-PSK; WPA2-PSK	AES	1.0	Conf.
<input type="radio"/>	FRS-305	0011E0100305	39%	1	OPEN	Not Use	1.0	Conf.

WPS Connection

Refresh
Mode: Enrollee
Client PIN: 31669603
PIN Start

PBC Start
Cancel

Renew PIN

WPS Status



4.3 Administrator

4.3.1 Management

At this page, you can configure administrator account and password.

The screenshot displays a web interface for System Management. On the left is a navigation menu with categories: Network, Wireless, and Administrator. Under Administrator, there are sub-items: Management (selected), Upload Firmware, Settings Management, and Status. The main content area is titled "System Management" and contains the text "You may configure administrator account and password." Below this are two sections: "Administrator Settings" and "Device Name Settings".

Administrator Settings

Account	<input type="text" value="admin"/>
Password	<input type="text"/> (Max Length: 16 characters)
Password Confirm	<input type="text"/>

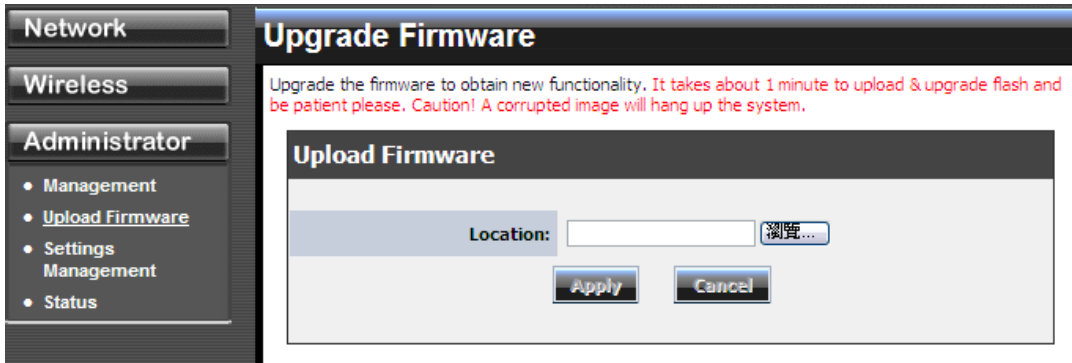
Device Name Settings

Device Name	<input type="text" value="TEW-647GA"/>
-------------	--



4.3.2 Upload Firmware

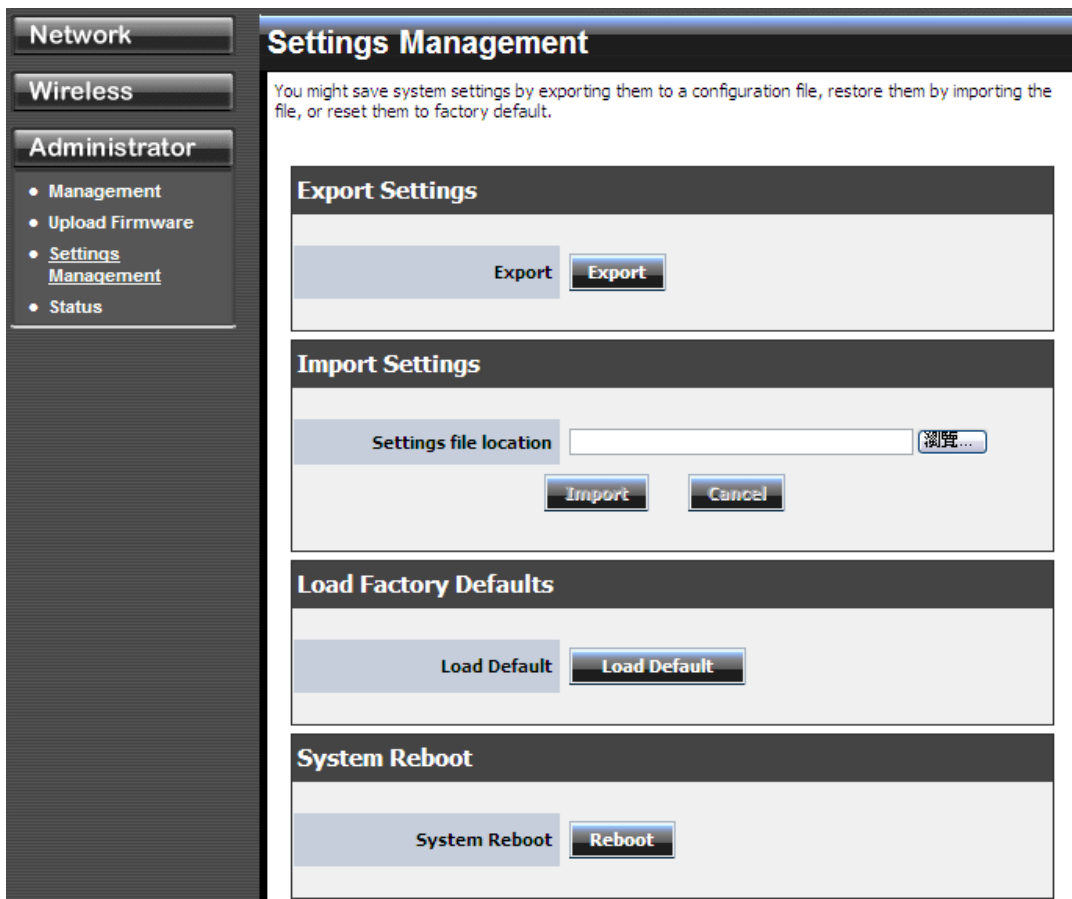
By assigning firmware location, you can upload firmware at this page.



Once you have a firmware update on your computer, use this option to browse for the file and then upload the information into the router.

4.3.3 Setting Management

You can save system settings by exporting them to a configuration file, restore them by importing the file, or reset them to factory default.



Export Settings

This option allows you to export and then save the router's configuration to a file on your computer. Be sure to save the configuration before performing a firmware upgrade.

Import Settings

Use this option to restore previously saved router configuration settings.

Load Factory Defaults

This option restores all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be



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lost. If you want to save your router configuration settings, use the Export Settings option above.

System Reboot

This restarts the router. It is useful for restarting when you are not near the device.



4.3.4 Status

You can check system information and network configurations on this page.

Network

Wireless

Administrator

- Management
- Upload Firmware
- Settings Management
- **Status**

Status

The device status.

System Info	
Firmware Version	0.0.0.172, 22-Oct-2008
System Up Time	455
MAC Address	00:0C:43:30:52:F0

Network Configurations	
Connected Type	Static IP
MAC Address	00:0C:43:30:52:77
IP Address	192.168.10.101
Subnet Mask	255.255.255.0
Default Gateway	

Wireless LAN	
Wireless Radio	ON
MAC Address	00:0C:43:30:52:F0
Security Mode	Disabled

Link Status	
Status	Disconnected
Extra Info	
Channel	
Link Quality	
Signal Strength	
Noise Level	
Channel BandWidth	
Guard Interval	
MCS	



5. Glossary

A

Access Control List

ACL. This is a database of network devices that are allowed to access resources on the network.

Access Point

AP. Device that allows wireless clients to connect to it and access the network

Ad-hoc network

Peer-to-Peer network between wireless clients

Address Resolution Protocol

ARP. Used to map MAC addresses to IP addresses so that conversions can be made in both directions.

Advanced Encryption Standard

AES. Government encryption standard

Alphanumeric

Characters A-Z and 0-9

Antenna

Used to transmit and receive RF signals.

ASCII

American Standard Code for Information Interchange. This system of characters is most commonly used for text files

Attenuation

The loss in strength of digital and analog signals. The loss is greater when the signal is being transmitted over long distances.

Authentication



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To provide credentials, like a Password, in order to verify that the person or device is really who they are claiming to be

Automatic Private IP Addressing

APIPA. An IP address that that a Windows computer will assign itself when it is configured to obtain an IP address automatically but no DHCP server is available on the network

B

Backward Compatible

The ability for new devices to communicate and interact with older legacy devices to guarantee interoperability

Bandwidth

The maximum amount of bytes or bits per second that can be transmitted to and from a network device

Beacon

A data frame by which one of the stations in a Wi-Fi network periodically broadcasts network control data to other wireless stations.

Bit rate

The amount of bits that pass in given amount of time

Bit/sec

Bits per second

BOOTP

Bootstrap Protocol. Allows for computers to be booted up and given an IP address with no user intervention

Broadcast

Transmitting data in all directions at once

Browser

A program that allows you to access resources on the web and provides them to you graphically

C



CAT 5

Category 5. Used for 10/100 Mbps or 1Gbps Ethernet connections

Client

A program or user that requests data from a server

Collision

When do two devices on the same Ethernet network try and transmit data at the exact same time.

Cookie

Information that is stored on the hard drive of your computer that holds your preferences to the site that gave your computer the cookie

D

Data

Information that has been translated into binary so that it can be processed or moved to another device

Data-Link layer

The second layer of the OSI model. Controls the movement of data on the physical link of a network

dBd

Decibels related to dipole antenna

dBi

Decibels relative to isotropic radiator

dBm

Decibels relative to one milliwatt

Decrypt

To unscramble an encrypted message back into plain text

Default

A predetermined value or setting that is used by a program when no user input has been entered for this value or setting



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DHCP

Dynamic Host Configuration Protocol: Used to automatically assign IP addresses from a predefined pool of addresses to computers or devices that request them

Digital certificate:

An electronic method of providing credentials to a server in order to have access to it or a network

Direct Sequence Spread Spectrum

DSSS: Modulation technique used by 802.11b wireless devices

DNS

Domain Name System: Translates Domain Names to IP addresses

Domain name

A name that is associated with an IP address

Download

To send a request from one computer to another and have the file transmitted back to the requesting computer

Duplex

Sending and Receiving data transmissions at the same time

Dynamic IP address

IP address that is assigned by a DHCP server and that may change. Cable Internet providers usually use this method to assign IP addresses to their customers.

E

EAP

Extensible Authentication Protocol

Encryption

Converting data into cyphertext so that it cannot be easily read

Ethernet

The most widely used technology for Local Area Networks.

F



File server

A computer on a network that stores data so that the other computers on the network can all access it

File sharing

Allowing data from computers on a network to be accessed by other computers on the network with different levels of access rights

Firewall

A device that protects resources of the Local Area Network from unauthorized users outside of the local network

Firmware

Programming that is inserted into a hardware device that tells it how to function

Fragmentation

Breaking up data into smaller pieces to make it easier to store

FTP

File Transfer Protocol. Easiest way to transfer files between computers on the Internet

Full-duplex

Sending and Receiving data at the same time

G

Gain

The amount an amplifier boosts the wireless signal

Gateway

A device that connects your network to another, like the internet

Gbps

Gigabits per second

Gigabit Ethernet

Transmission technology that provides a data rate of 1 billion bits per second

GUI

Graphical user interface



H

Half-duplex

Data cannot be transmitted and received at the same time

Hashing

Transforming a string of characters into a shorter string with a predefined length

Hexadecimal

Characters 0-9 and A-F

Hop

The action of data packets being transmitted from one AP to another

Host

Computer on a network

HTTP

Hypertext Transfer Protocol is used to transfer files from HTTP servers (web servers) to HTTP clients (web browsers)

HTTPS

HTTP over SSL is used to encrypt and decrypt HTTP transmissions

Hub

A networking device that connects multiple devices together

I

ICMP

Internet Control Message Protocol

IEEE

Institute of Electrical and Electronics Engineers

IGMP

Internet Group Management Protocol is used to make sure that computers can report their multicast group membership to adjacent APs

IIS

Internet Information Server is a WEB server and FTP server provided by Microsoft



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Infrastructure

In terms of a wireless network, this is when wireless clients use an Access Point to gain access to the network

Internet

A system of worldwide networks which use TCP/IP to allow for resources to be accessed from computers around the world

Internet Explorer

A World Wide Web browser created and provided by Microsoft

Internet Protocol

The method of transferring data from one computer to another on the Internet

Internet Protocol Security

IPsec provides security at the packet processing layer of network communication

Internet Service Provider

An ISP provides access to the Internet to individuals or companies

Intranet

A private network

Intrusion Detection

A type of security that scans a network to detect attacks coming from inside and outside of the network

IP

Internet Protocol

IP address

A 32-bit number, when talking about Internet Protocol Version 4, that identifies each computer that transmits data on the Internet or on an Intranet

IPsec

Internet Protocol Security

IPX



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Internetwork Packet Exchange is a networking protocol developed by Novel to enable their Netware clients and servers to communicate

ISP

Internet Service Provider

J

Java

A programming language used to create programs and applets for web pages

K

Kbps

Kilobits per second

Kbyte

Kilobyte

L

LAN

Local Area Network

Latency

The amount of time that it takes a packet to get from the one point to another on a network. Also referred to as delay

LED

Light Emitting Diode

Legacy

Older devices or technology

Local Area Network

A group of computers in a building that usually access files from a server

LPR/LPD

"Line Printer Requestor"/"Line Printer Daemon". A TCP/IP protocol for transmitting streams of printer data.

L2TP



M

MAC address

A unique hardware ID assigned to every Ethernet adapter by the manufacturer.

Mbps

Megabits per second

MDI

Medium Dependent Interface is an Ethernet port for a connection to a straight-through cable

MDIX

Medium Dependent Interface Crossover, is an Ethernet port for a connection to a crossover cable

MIB

Management Information Base is a set of objects that can be managed by using SNMP

Modem

A device that Modulates digital signals from a computer to an analog signal in order to transmit the signal over phone lines. It also Demodulates the analog signals coming from the phone lines to digital signals for your computer

MPPE

Microsoft Point-to-Point Encryption is used to secure data transmissions over PPTP connections

MTU

Maximum Transmission Unit is the largest packet that can be transmitted on a packet-based network like the Internet

Multicast

Sending data from one device to many devices on a network

N

NAT



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Network Address Translation allows many private IP addresses to connect to the Internet, or another network, through one IP address

NetBEUI

NetBIOS Extended User Interface is a Local Area Network communication protocol. This is an updated version of NetBIOS

NetBIOS

Network Basic Input/Output System

Netmask

Determines what portion of an IP address designates the Network and which part designates the Host

Network Interface Card

A card installed in a computer or built onto the motherboard that allows the computer to connect to a network

Network Layer

The third layer of the OSI model which handles the routing of traffic on a network

Network Time Protocol

Used to synchronize the time of all the computers in a network

NIC

Network Interface Card

NTP

Network Time Protocol

O

OFDM

Orthogonal Frequency-Division Multiplexing is the modulation technique for both 802.11a and 802.wireless g

OSI

Open Systems Interconnection is the reference model for how data should travel between two devices on a network



OSPF

Open Shortest Path First is a routing protocol that is used more than RIP in larger scale networks because only changes to the routing table are sent to all the other APs in the network as opposed to sending the entire routing table at a regular interval, which is how RIP functions

P

Password

A sequence of characters that is used to authenticate requests to resources on a network

Personal Area Network

The interconnection of networking devices within a range of 10 meters

Physical layer

The first layer of the OSI model. Provides the hardware means of transmitting electrical signals on a data carrier

Ping

A utility program that verifies that a given Internet address exists and can receive messages. The utility sends a control packet to the given address and waits for a response.

PoE

Power over Ethernet is the means of transmitting electricity over the unused pairs in a category 5 Ethernet cable

Port

A logical channel endpoint in a network. A computer might have only one physical channel (its Ethernet channel) but can have multiple ports (logical channels) each identified by a number.

PPP

Point-to-Point Protocol is used for two computers to communicate with each over a serial interface, like a phone line

PPPoE



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Point-to-Point Protocol over Ethernet is used to connect multiple computers to a remote server over Ethernet

PPTP

Point-to-Point Tunneling Protocol is used for creating VPN tunnels over the Internet between two networks

Preamble

Used to synchronize communication timing between devices on a network

Q

QoS

Quality of Service

R

RADIUS

Remote Authentication Dial-In User Service allows for remote users to dial into a central server and be authenticated in order to access resources on a network

Reboot

To restart a computer and reload its operating software or firmware from nonvolatile storage.

Rendezvous

Apple's version of UPnP, which allows for devices on a network to discover each other and be connected without the need to configure any settings

Repeater

Retransmits the signal of an Access Point in order to extend its coverage

RIP

Routing Information Protocol is used to synchronize the routing table of all the APs on a network

RJ-11

The most commonly used connection method for telephones

RJ-45



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The most commonly used connection method for Ethernet

RS-232C

The interface for serial communication between computers and other related devices

RSA

Algorithm used for encryption and authentication

S

Server

A computer on a network that provides services and resources to other computers on the network

Session key

An encryption and decryption key that is generated for every communication session between two computers

Session layer

The fifth layer of the OSI model which coordinates the connection and communication between applications on both ends

Simple Mail Transfer Protocol

Used for sending and receiving email

Simple Network Management Protocol

Governs the management and monitoring of network devices

SIP

Session Initiation Protocol. A standard protocol for initiating a user session that involves multimedia content, such as voice or chat.

SMTP

Simple Mail Transfer Protocol

SNMP

Simple Network Management Protocol

SOHO

Small Office/Home Office



SPI

Stateful Packet Inspection

SSH

Secure Shell is a command line interface that allows for secure connections to remote computers

SSID

Service Set Identifier is a name for a wireless network

Stateful inspection

A feature of a firewall that monitors outgoing and incoming traffic to make sure that only valid responses to outgoing requests are allowed to pass through the firewall

Subnet mask

Determines what portion of an IP address designates the Network and which part designates the Host

Syslog

System Logger -- a distributed logging interface for collecting in one place the logs from different sources. Originally written for UNIX, it is now available for other operating systems, including Windows.

T

TCP

Transmission Control Protocol

TCP/IP

Transmission Control Protocol/Internet Protocol

TCP Raw

A TCP/IP protocol for transmitting streams of printer data.

TFTP

Trivial File Transfer Protocol is a utility used for transferring files that is simpler to use than FTP but with less features

Throughput



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The amount of data that can be transferred in a given time period

Traceroute

A utility displays the routes between your computer and specific destination

U

UDP

User Datagram Protocol

Unicast

Communication between a single sender and receiver

Universal Plug and Play

A standard that allows network devices to discover each other and configure themselves to be a part of the network

Upgrade

To install a more recent version of a software or firmware product

Upload

To send a request from one computer to another and have a file transmitted from the requesting computer to the other

UPnP

Universal Plug and Play

URL

Uniform Resource Locator is a unique address for files accessible on the Internet

USB

Universal Serial Bus

UTP

Unshielded Twisted Pair

V

Virtual Private Network

VPN: A secure tunnel over the Internet to connect remote offices or users to their company's network



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VLAN

Virtual LAN

Voice over IP

Sending voice information over the Internet as opposed to the PSTN

VoIP

Voice over IP

W

Wake on LAN

Allows you to power up a computer through its Network Interface Card

WAN

Wide Area Network

WCN

Windows Connect Now. A Microsoft method for configuring and bootstrapping wireless networking hardware (access points) and wireless clients, including PCs and other devices.

WDS

Wireless Distribution System. A system that enables the interconnection of access points wirelessly.

Web browser

A utility that allows you to view content and interact with all of the information on the World Wide Web

WEP

Wired Equivalent Privacy is security for wireless networks that is supposed to be comparable to that of a wired network

Wi-Fi

Wireless Fidelity

Wi-Fi Protected Access



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An updated version of security for wireless networks that provides authentication as well as encryption

Wide Area Network

The larger network that your LAN is connected to, which may be the Internet itself, or a regional or corporate network

Wireless ISP

A company that provides a broadband Internet connection over a wireless connection

Wireless LAN

Connecting to a Local Area Network over one of the 802.11 wireless standards

WISP

Wireless Internet Service Provider

WLAN

Wireless Local Area Network

WPA

Wi-Fi Protected Access. A Wi-Fi security enhancement that provides improved data encryption, relative to WEP.

X

xDSL

A generic term for the family of digital subscriber line (DSL) technologies, such as ADSL, HDSL, RADSL, and SDSL.

Y

Yagi antenna

A directional antenna used to concentrate wireless signals on a specific location

Z

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802.11

A family of specifications for wireless local area networks (WLANs) developed by a working group of the Institute of Electrical and Electronics Engineers (IEEE).