




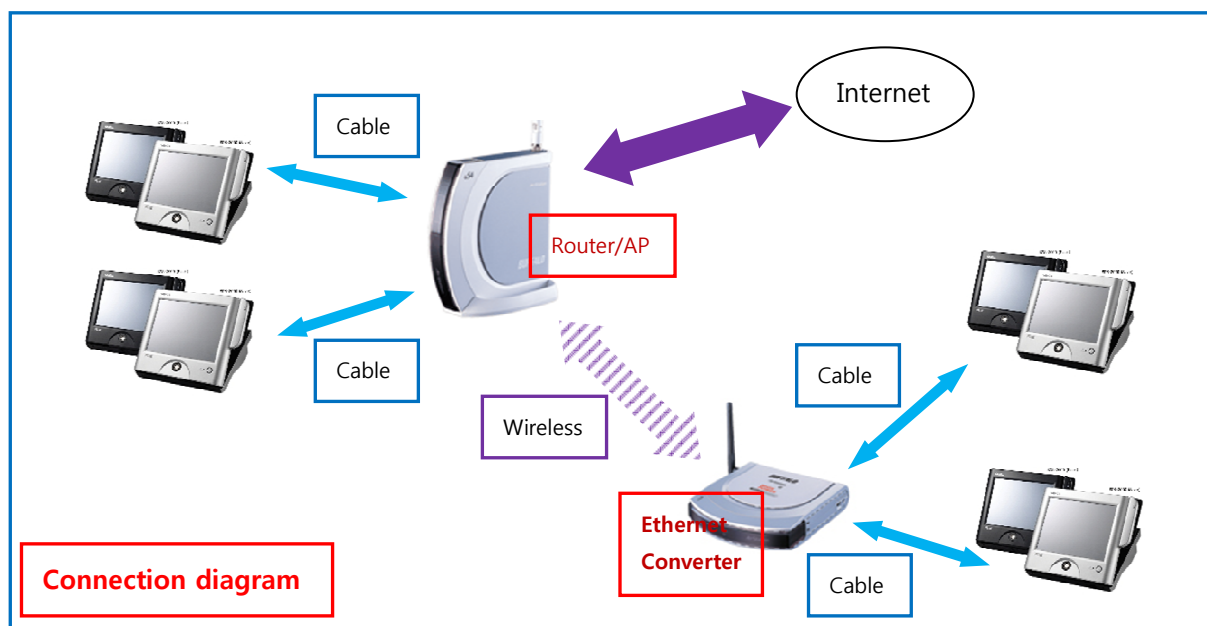
< Simple IRC connection in Wireless LAN environment for SPS-2000 >

This document show you simple example about IRC connection in the Wireless-LAN environment for SPS-2000.

This example uses the router and Ethernet converter of Buffalo-technology for test. If you use the other device, configuration form will be different from this document.

1. Using Devices

Image	Model	Device
	The Buffalo AirStation G54 Wireless Cable/DSL Smart Router(WHR-G54S)	Access-Point / Router (www.buffalo-technology.com)
	The Buffalo Turbo G MIMO Performance Wireless Ethernet Converter (WLI-TX4-G54HP)	Ethernet Converter (www.buffalo-technology.com)
	Sam4s POS system (SPS-2000)	POS system



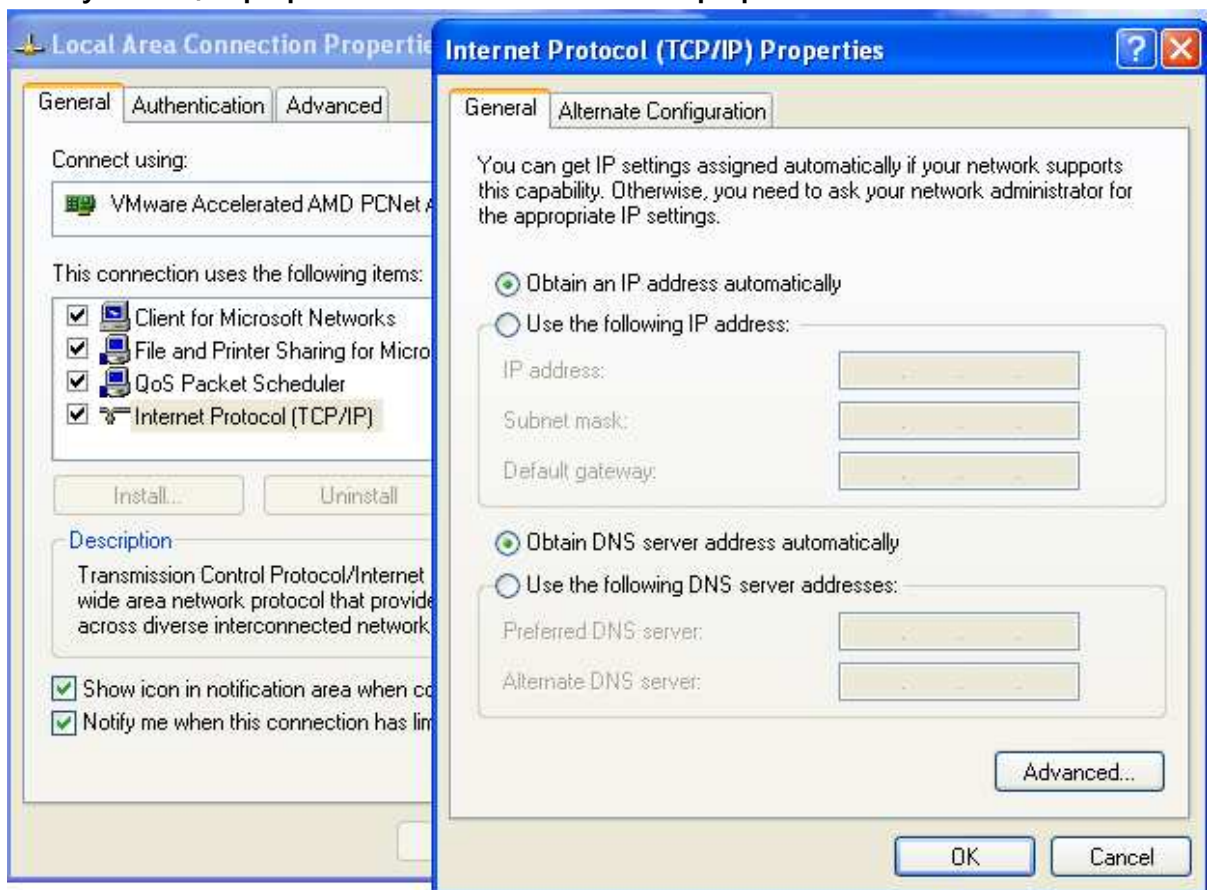
2. Use Static IP address

1) Use the default SPS-2000 IP address

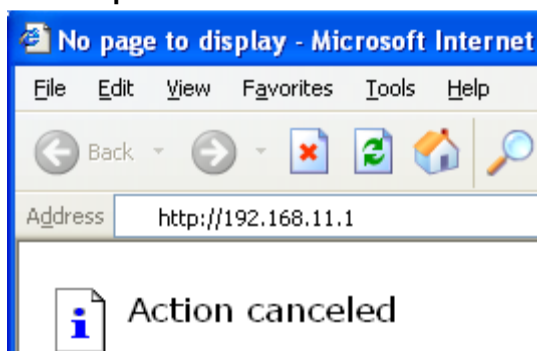
The SPS-2000 use the default IP address related the register number. If your register number is set to 1, the default IP address is set to "192.168.0.11"

■Setting up the AP(Access Point / router : Buffalo AirStation G54 Smart Router) to same subnet address with SPS-2000.(ex 192.168.0.1)

->Set your TCP/IP properties in local area connection properties to below

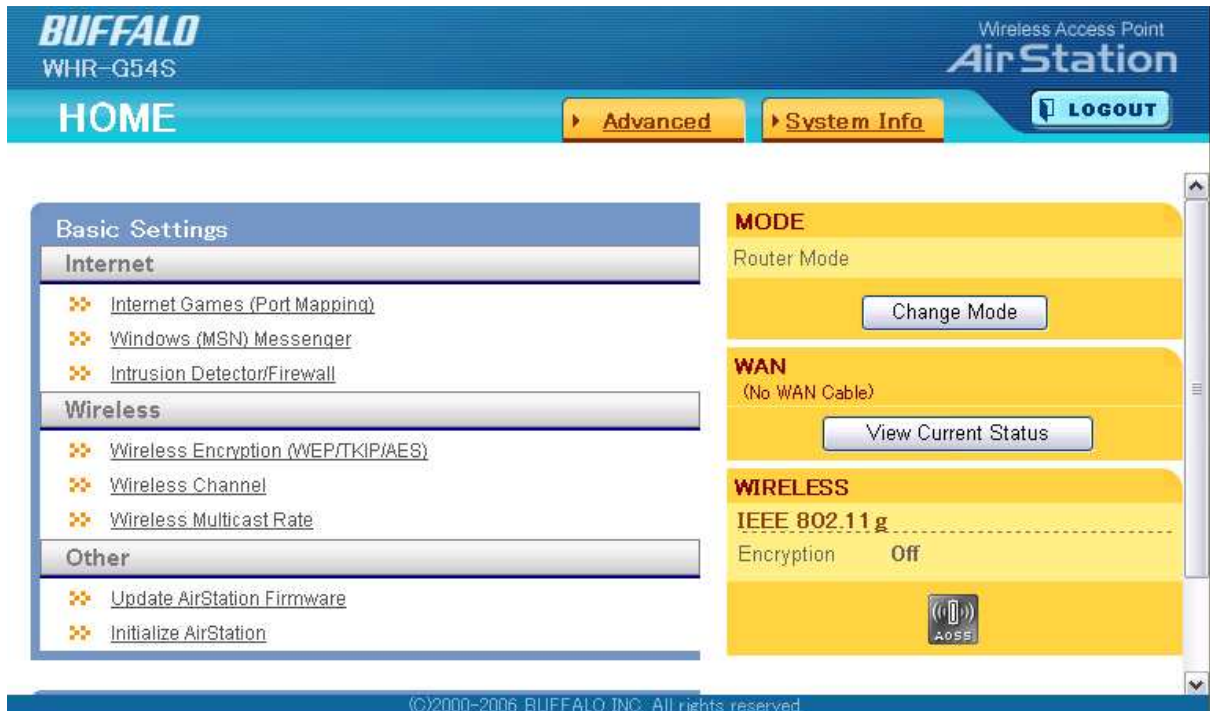


->Run the internet explorer and then input the below address to your address input box for set up the AP's IP address.



->Input the user ID "root".(don't input the password)

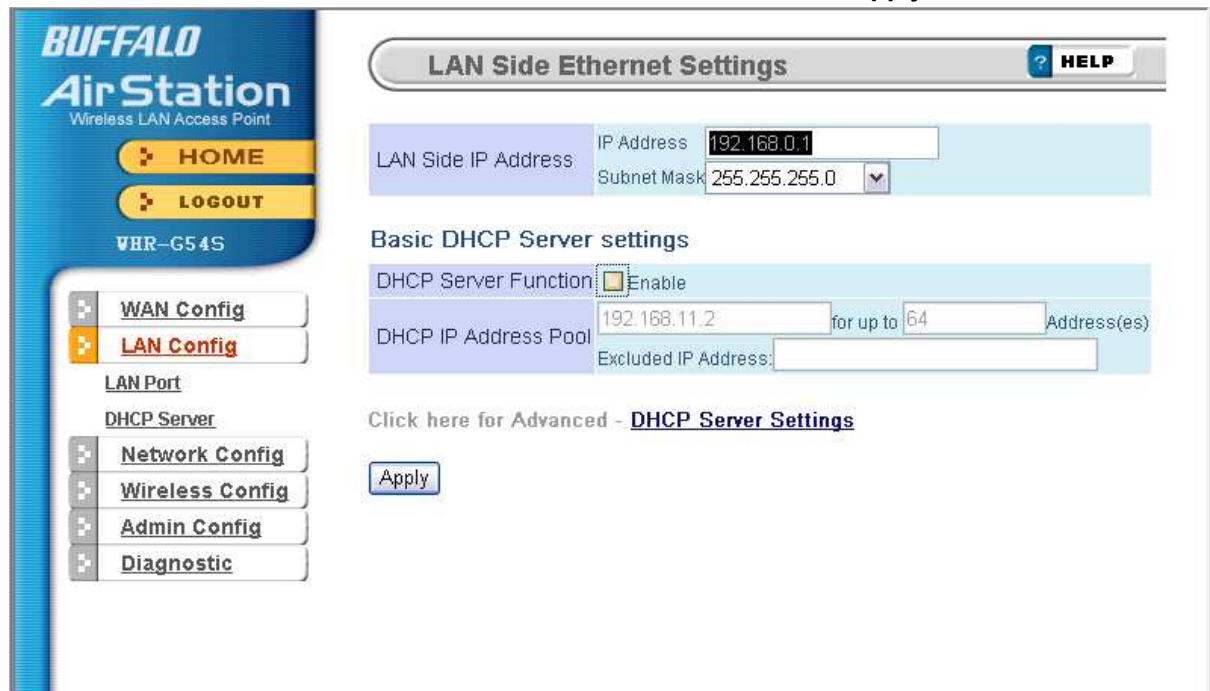
->Select the "Advanced" tab



The screenshot shows the Buffalo AirStation WHR-G54S web interface. The top navigation bar includes 'HOME', 'Advanced' (selected), 'System Info', and 'LOGOUT'. The left sidebar lists 'Basic Settings' with sub-items: 'Internet' (Internet Games, Windows Messenger, Intrusion Detector), 'Wireless' (Wireless Encryption, Channel, Multicast Rate), and 'Other' (Update Firmware, Initialize). The main content area on the right shows 'MODE' (Router Mode), 'WAN' (No WAN Cable), and 'WIRELESS' (IEEE 802.11g, Encryption Off). A copyright notice at the bottom reads '(C)2000-2006 BUFFALO INC. All rights reserved.'

->Select the LAN Config and set the LAN Side IP address to "192.168.0.1"

->And then clear the DHCP Server function checked and click the "Apply" button



The screenshot shows the 'LAN Side Ethernet Settings' page. The left sidebar has 'LAN Config' selected. The main area shows 'LAN Side IP Address' with IP Address '192.168.0.1' and Subnet Mask '255.255.255.0'. Under 'Basic DHCP Server settings', the 'DHCP Server Function' checkbox is unchecked. The 'DHCP IP Address Pool' is '192.168.11.2' for up to '64' addresses. An 'Apply' button is at the bottom. A link 'Click here for Advanced - DHCP Server Settings' is also present.

->Click the "Set" button and follow the message in the next window.

BUFFALO
AirStation
Wireless LAN Access Point

HOME

LOGOUT

WHR-G54S

WAN Config

LAN Config

LAN Port

DHCP Server

Network Config

Wireless Config

Admin Config

Diagnostic

Change the LAN side IP address. Please re-configure the network settings of PC.

Push "Set" button to confirm settings.

To continue setup, perform the following procedure.

1. Close all browser windows.
2. Confirm that a connection between the computer and the router is reestablished.
3. Reopen browser and reconnect to AirStation Configuration Utility.

Refer to the user manual for more information.

BUFFALO
AirStation
Wireless LAN Access Point

HOME

LOGOUT

WHR-G54S

WAN Config

LAN Config

LAN Port

DHCP Server

Network Config

Wireless Config

Admin Config

Diagnostic

Now re-starting!

Estimated time to restart about 39 s. Please Wait...

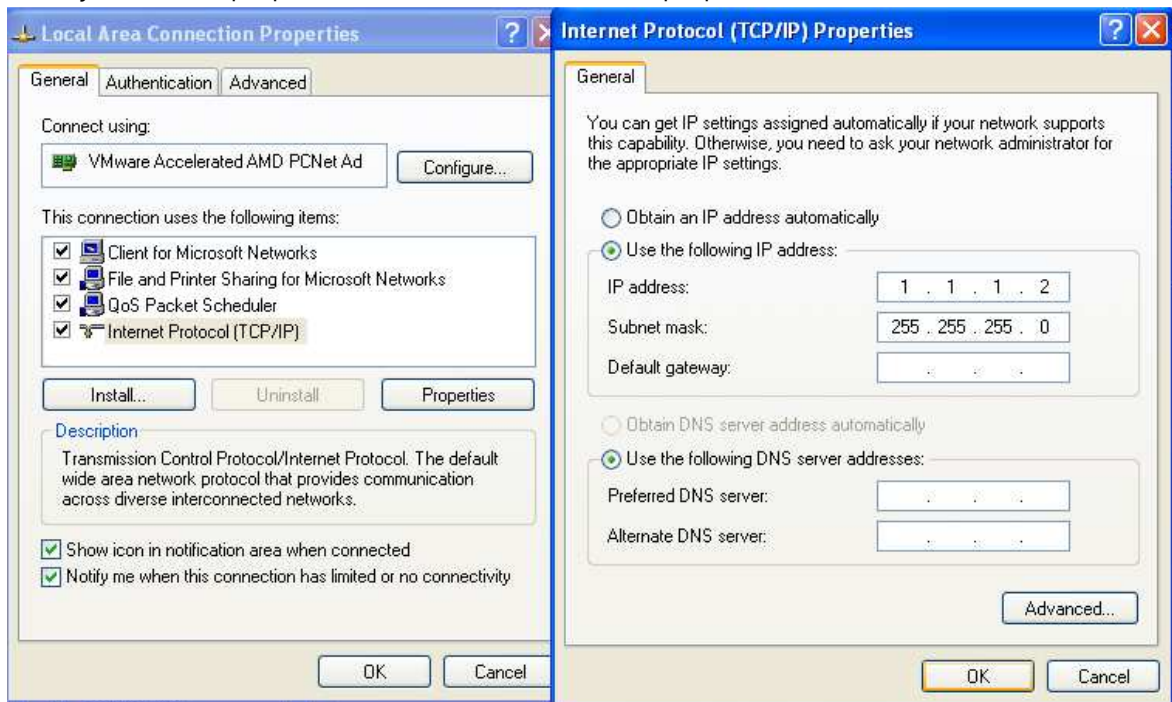
To continue setup, perform the following procedure.

1. Close all browser windows.
2. Confirm that a connection between the computer and the router is reestablished.
3. Reopen browser and reconnect to AirStation Configuration Utility.

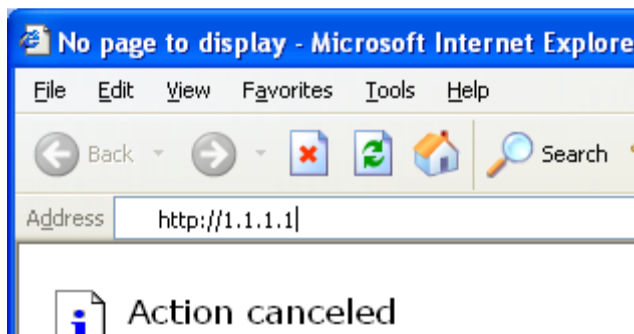
Refer to the user manual for more information.

■ Setting up the Ethernet Converter (Buffalo WLI-TX4-G54HP) : Search the AP's SSID in Configuration page

-> Set your TCP/IP properties in local area connection properties to below



-> Run the internet explorer and then input the below address to your address input box for set the Ethernet converter's SSID.



->Input the user name to "root" and blank password.

->And then search the AP's SSID(Default SSID is AP's MAC address number. Note the WHR-G54S manual)

BUFFALO AirStation Ethernet Converter WLI-TX4-G54HP

Wizard

WLI-TX4-G54HP Configuration

Wireless Connection Status	
SSID	001601130882
Wireless Channel	7
Network Type	Infrastructure
Wireless Status	100%

Refresh

SSID (Network Name) ? 001601130882
Search

Wireless Network Type ?
☒ Infrastructure (AP based Wireless Network)
☐ Ad hoc (Client to Client Wireless Network)

Encryption Mode ? Disable

Apply Settings

->You can see the below wireless router list when click the "Search" button.

->Select the specify wireless router(WHR-G54S) and click the select button.

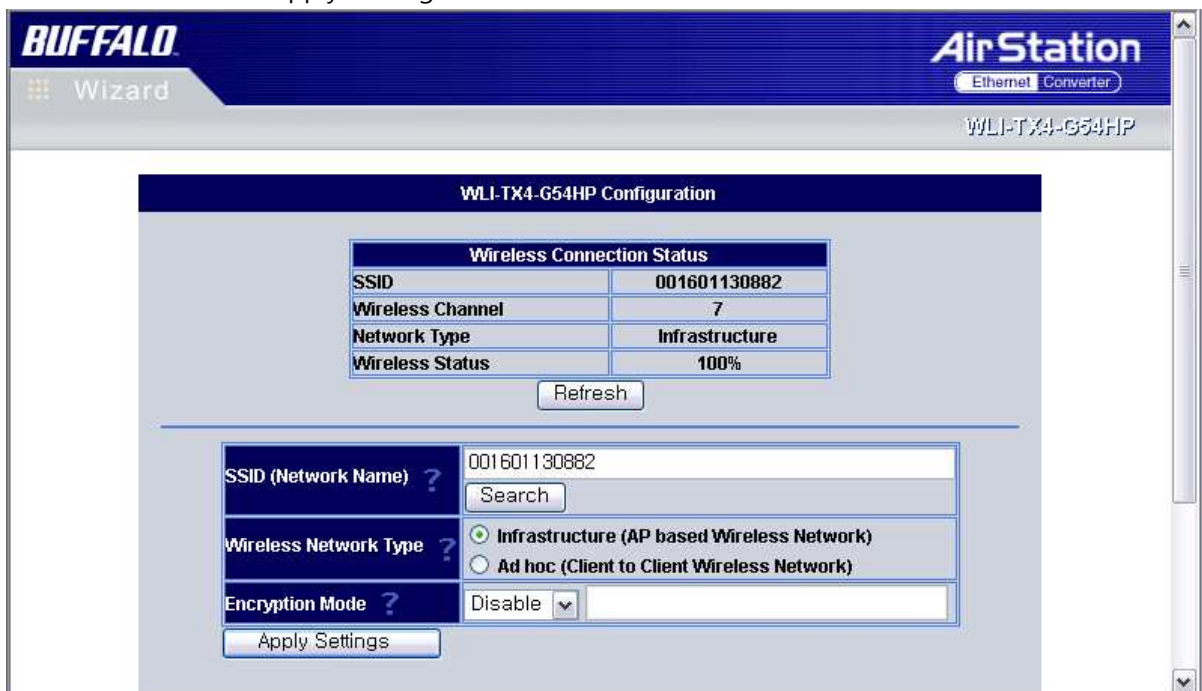
Search for SSID

Select	SSID (Network Name)	Wireless Channel	Signal Strength	Encryption	Wireless Mode	Network Type
<input checked="" type="radio"/>	001601130882	2	STRONG	NO	11g(54M)	Infrastructure
<input type="radio"/>	sam4s	11	STRONG	YES	11g(54M)	Infrastructure
<input type="radio"/>	ABNS	6	STRONG	NO	11g(54M)	Infrastructure
<input type="radio"/>	pgptime	11	NORMAL	NO	11g(54M)	Infrastructure
<input type="radio"/>	voip#1	6	NORMAL	YES	11g(54M)	Infrastructure
<input type="radio"/>	pgpwireless	11	NORMAL	YES	11g(54M)	Infrastructure
<input type="radio"/>	inaom03	4	WEAK	NO	11g(54M)	Infrastructure
<input type="radio"/>	inaom02	1	WEAK	NO	11g(54M)	Infrastructure
<input type="radio"/>	ERS	2	WEAK	NO	11g(54M)	Infrastructure

NOTE: After selecting a wireless network, you must press the 'Apply Settings' button on the 'Wireless Settings' page. If you do not apply the settings, the Ethernet Converter will not connect to the selected wireless network.

Select Retry Cancel

->And then click the "Apply Settings" button.

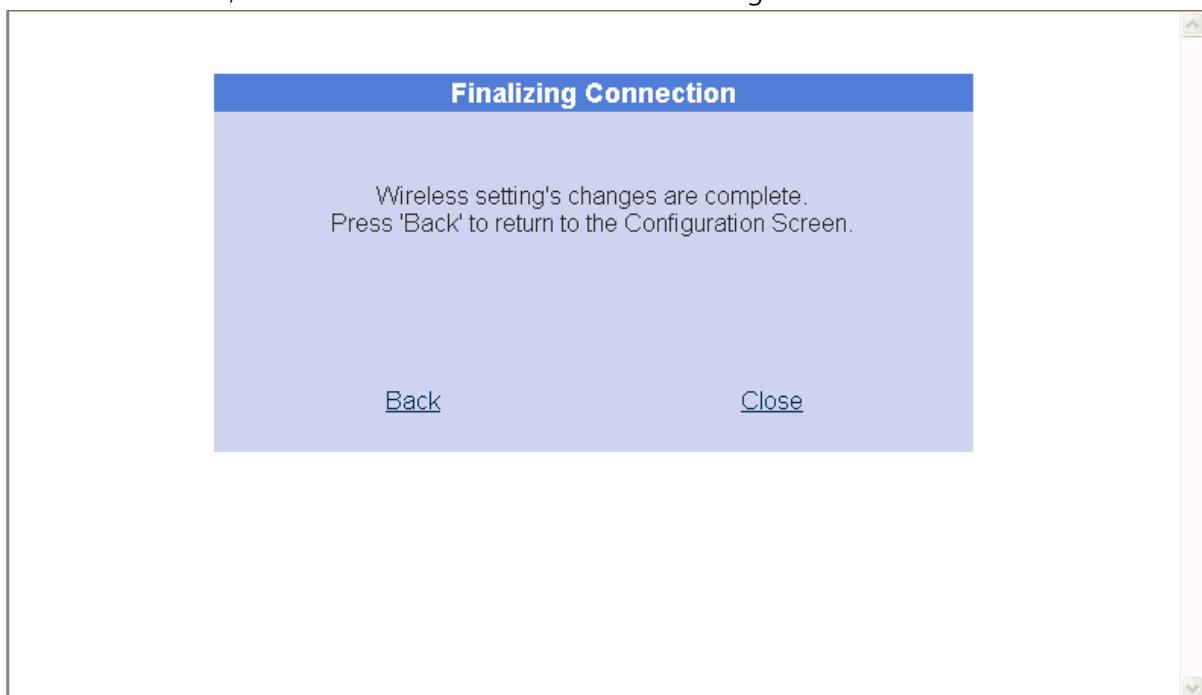


The image shows the Buffalo AirStation WLI-TX4-G54HP Configuration Wizard. The top header includes the Buffalo logo, the word "Wizard", and the product name "AirStation WLI-TX4-G54HP". The main content area is titled "WLI-TX4-G54HP Configuration". It features a "Wireless Connection Status" table with the following data:

Wireless Connection Status	
SSID	001601130882
Wireless Channel	7
Network Type	Infrastructure
Wireless Status	100%

Below the table is a "Refresh" button. Underneath, there are configuration fields: "SSID (Network Name)" with a text box containing "001601130882" and a "Search" button; "Wireless Network Type" with two radio buttons, "Infrastructure (AP based Wireless Network)" (selected) and "Ad hoc (Client to Client Wireless Network)"; and "Encryption Mode" with a dropdown menu set to "Disable". An "Apply Settings" button is at the bottom of the configuration section.

->Click the "Close", for close the browser and finish the configuration.



The image shows the "Finalizing Connection" screen. It has a blue header with the title "Finalizing Connection". The main text area contains the message: "Wireless setting's changes are complete. Press 'Back' to return to the Configuration Screen." At the bottom, there are two buttons: "Back" and "Close".

- Set the IRC related configuration in SPS-2000

2) Use specific IP address

You can set up the specific IP address according to your network connection environment. It need set up not only router and Ethernet converter but also the SPS-2000.

- Set your AP's address to specific IP address by AP configuration.(ex. 192.168.11.1)
- Search the AP's SSID for Ethernet converter(WLI-TX4-G54HP).
- Set your SPS-2000's IP address to same subnet of your AP's configuration.

->Select the S-MODE SYSTEM OPTIONS->PAGE#4->NETWORK SETTING->YES

->Input the IP address and subnet mask to same subnet of your AP's configuration

S-MODE SYSTEM OPTIONS			
PAGE #1	PAGE #2	PAGE #3	PAGE #4
# NETWORK SETTING?		<input type="button" value="YES"/>	
AUTOMATICALLY GET IP ADDRESS? (DHCP)		<input type="button" value="NO"/>	
IP ADDRESS		<input type="text" value="0.0.0.0"/>	
SUBNET MASK		<input type="text" value="0.0.0.0"/>	
GATEWAY		<input type="text" value="0.0.0.0"/>	
DNS SERVERS#1		<input type="text" value="0.0.0.0"/>	
DNS SERVERS#2		<input type="text" value="0.0.0.0"/>	
PC Connection type		<input type="button" value="SERIAL"/>	
<input type="button" value="OK"/>		<input type="button" value="CANCEL"/>	

S-MODE SYSTEM OPTIONS			
PAGE #1	PAGE #2	PAGE #3	PAGE #4
# NETWORK SETTING?		<input type="button" value="YES"/>	
AUTOMATICALLY GET IP ADDRESS? (DHCP)		<input type="button" value="NO"/>	
IP ADDRESS		<input type="text" value="192.168.11.10"/>	
SUBNET MASK		<input type="text" value="255.255.255.0"/>	
GATEWAY		<input type="text" value="0.0.0.0"/>	
DNS SERVERS#1		<input type="text" value="0.0.0.0"/>	
DNS SERVERS#2		<input type="text" value="0.0.0.0"/>	
PC Connection type		<input type="button" value="SERIAL"/>	
<input type="button" value="OK"/>		<input type="button" value="CANCEL"/>	

2. DHCP

The SPS-2000 and Buffalo's smart router support the DHCP IP configuration. If you want the automatically IP address set for the IRC, check the DHCP enable button in the AP's configuration window. And SPS-2000 set the S-MODE SYSTEM OPTIONS->PAGE#4->AUTOMATICALLY GET IP ADDRESS option to "YES"(It need the NETWORK SETTING "YES" option before).

S-MODE SYSTEM OPTIONS			
PAGE #1	PAGE #2	PAGE #3	PAGE #4
# NETWORK SETTING?		<input type="button" value="YES"/>	
AUTOMATICALLY GET IP ADDRESS? (DHCP)		<input type="button" value="YES"/>	
IP ADDRESS		<input type="text" value="192.168.11.10"/>	
SUBNET MASK		<input type="text" value="255.255.255.0"/>	
GATEWAY		<input type="text" value="0.0.0.0"/>	
DNS SERVERS#1		<input type="text" value="0.0.0.0"/>	
DNS SERVERS#2		<input type="text" value="0.0.0.0"/>	
PC Connection type		<input type="button" value="SERIAL"/>	
<input type="button" value="OK"/>		<input type="button" value="CANCEL"/>	