

SJE10 USER MANUAL

axess•tel
express card smart kit





Important Notice

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Axesstel WIFI smart kit are used in a normal manner with a well-constructed network, the Axesstel WIFI smart kit should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Axesstel accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Axesstel WIFI smart kit, or for failure of the Axesstel WIFI smart kit to transmit or receive such data.

Safety and Hazards

Do not operate the Axesstel WIFI smart kit:

- In areas where blasting is in progress
- Where explosive atmospheres may be present
- Near medical equipment
- Near life support equipment, or any equipment that may be susceptible to any form of radio interference. In such areas, the Axesstel WIFI smart kit **MUST BE POWERED OFF**. The Axesstel WIFI smart kit can transmit signals that could interfere with this equipment.

Do not operate the Axesstel WIFI smart kit in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the Axesstel WIFI smart kit **MUST BE POWERED OFF**. When operating, the Axesstel WIFI smart kit can transmit signals that could interfere with various onboard systems.

Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. The Axesstel WIFI smart kit may be used at this time.

The driver or operator of any vehicle should not operate the Axesstel WIFI smart kit while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.



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Introduction

Thank you for purchasing the Axesstel SJE10 WIFI Smart kit (the Smart Jacket). This user manual will help you setup, configure and outline best practices for maximizing your wireless home network performance with the Smart Jacket. Please be sure to read through this User Manual completely, and pay special attention to the section entitled "Placement of your Smart Jacket for Optimal Performance" on page 2.

Placement of your Smart Jacket for Optimal Performance

Your wireless connection will be stronger the closer your computer is to your Smart Jacket. Typical indoor operating range for Wi-Fi wireless devices is between 100 and 200 feet. For HSUPA operation, a line-of-sight with the radio base station is preferred and yields the strongest signal strength.

In the same way, your wireless connection and performance will degrade somewhat as the distance between your Smart Jacket and connected devices increases, as well as between the Smart Jacket and the radio base station. This may or may not be noticeable to you. As you move farther from your Smart Jacket, connection speed may decrease. Factors that can weaken signals simply by getting in the way of your network's radio waves are metal appliances or obstructions, and walls.

Note: While some of the items listed below can affect network performance, they will not prohibit your wireless network from functioning; if you are concerned that your network is not operating at its maximum effectiveness, this checklist may help.

1. Smart Jacket Placement

Place your Smart Jacket, the central connection point of your network, as close as possible to windows or in rooms at the outer side of your house. If you also use the Wi-Fi feature of the Smart Jacket, it should be placed near the center of your wireless network devices.

To achieve the best wireless network coverage:

- Ensure that your Smart Jacket's networking antennas are parallel to each other, and are positioned vertically (toward the ceiling). If your Smart



Jacket itself is positioned vertically, point the antennas as much as possible in an upward direction.

- In multistory homes, place the Smart Jacket on an upper floor.
- Try not to place the Smart Jacket near a cordless phone

2. Avoid Obstacles and Interference

Avoid placing your Smart Jacket near devices that may emit radio “noise,” such as microwave ovens. Dense objects that can inhibit wireless communication include:

- Refrigerators
- Washers and/or dryers
- Metal cabinets
- Large aquariums
- Metallic-based, UV-tinted windows

If your wireless signal seems weak in some spots, try to move the Smart Jacket to another location while observing the signal strength indicator. Since you may not know the location of an **WCDMA** radio base station serving your Smart Jacket, try to call your service provider and ask for the nearest base station of your home. Try placing the Smart Jacket closest and unobstructed to that base station.

Product Overview

In minutes you will be able to connect your computers to the Internet, share your Internet connection and network your computers. The following is a list of features that make your new Axestel Smart Jacket an ideal solution for your home or small office network. Implementation of these features depends on the particular service provider and account features you have chosen.

Some features described in this manual may not be supported by your service provider or may not be available with your network account. For details of the services and accounts available, contact your service provider.

WCDMA 3G services

The Smart Jacket operates over the WCDMA 3G technology that provides a variety of connectivity features when you plug in the EU230(the 3.75G Express card/34) to the Smart Jacket, depending on your service provider and account:

- HSDPA Supports Internet connections with data rates up to 7.2 Mbps (downlink from the network) and 3.6 Mbps (downlink to the network).



Actual speed depends on the network conditions.

- HSUPA Provides up-link performance of up to 5.76Mbit/s. Actual speed depends on the network conditions.

Once the connection is established, you can open your browser and connect to any web site that is accessible through the Internet, or access other Internet services (such as email).

The connection is “active” when data transmission is occurring. If data transmission stops for a period of time (determined by the network), the connection becomes “dormant”; see page 26.

Plug-and-Play

Smart Jacket has been provisioned at the factory for use with a particular service provider. This sets the Smart Jacket to use particular radio channels and enables services specific for that provider. Although the Smart Jacket comes with WEB-GUI, you don't have to install and use them if you simply want to connect to the Internet, assuming that your Smart Jacket has been activated with the network (The process of setting up your account is called activation. Activation involves action by the service provider and configuration of the Smart Jacket.)

Once the Smart Jacket has been activated, simply connect your computer with the Smart Jacket by wireless. Then you will have controls of the Smart Jacket performances and settings.

Works with Both PCs and Mac® Computers

The Smart Jacket supports a variety of networking environments including Mac OS® 9.x, X v10.x, AppleTalk®, Linux®, Windows® 98, Me, NT®, 2000, and XP, and others. All that is needed is an Internet browser and a network adapter that supports TCP/IP (the standard language of the Internet).

Top-View LED Display

Lighted LEDs on the top of the Smart Jacket and EU230 Card indicate which function is in operation. You can know the status in finding EU230' LED(the 3.75G Express card/34).

Connect LED

Solid Blue Valid connection in HSPA

Blinking Blue Data transferring in HSPA



Solid Yellow Valid connection in WCDMA
Blinking Yellow Data transferring in WCDMA
Solid Red Valid connection in GPRS
Blinking Red Data transferring in GPRS

Signal LED

Solid Blue Strong signal
Blinking Blue (once per blinking) Medium signal
Blinking Blue (twice per blinking) Low signal

Web-Based Advanced User Interface

You can set up the Smart Jacket's advanced functions easily through web browser, without having to install additional software onto the computer. There are no disks to install or keep track of and, best of all, you can make changes and perform setup functions from any computer on the network quickly and easily.

NAT IP Address Sharing

Your Smart Jacket employs Network Address Translation (NAT) to share the single IP address assigned to you by your Internet Service Provider while saving the cost of adding IP addresses to your Internet service account.

Built-In Dynamic Host Configuration Protocol (DHCP)

Built-In Dynamic Host Configuration Protocol (DHCP) on-board makes for the easiest possible connection of a network. The DHCP server will assign IP addresses to each computer automatically so there is no need for a complicated networking setup.

Integrated 802.11g Wireless Access Point

802.11g is an exciting new wireless technology that achieves data rates up to 54Mbps, nearly five times faster than 802.11b.

MAC Address Filtering

For added security, you can set up a list of MAC addresses (unique client identifiers) that are allowed access to your network. Every computer has its own MAC address. Simply enter these MAC addresses into a list using the Web-Based Advanced User Interface and you can control access to your network.



Knowing your Smart Jacket

Packages Contents

- Smart Jacket main unit
- User Manual
- Side Cover
- Power Supply
- Battery

Smart Jacket Interfaces

The Smart Jacket has been designed to be placed on a desktop. The LED indicators are easily visible on the top of the Smart Jacket to provide you with information about network activity and status.

1. Power LED

a. Adaptor only

OFF	Power is OFF
Solid Blue	Power is ON

b. Battery only

OFF	Power is OFF
Solid Blue	Power is ON
Blinking Blue	Battery is low

c. Adaptor and Battery

OFF	Power is OFF
Solid Blue	Power is ON, Battery is full
Red	Power is OFF, Battery is charging
Pink	Power is ON, Battery is charging

2 Wi-Fi LED

This LED indicates that your Smart Jacket is setup to have Wi-Fi capability. When the LED is blinking, it indicates that there are activities (data passed through).

OFF	No Wi-Fi
-----	----------



Solid Blue	Wi-Fi network within Modem is activated
Blinking Blue	Active data passed through Wi-Fi

3. Power Jack

Connect the included 5V DC power supply to this jack.

4. Rechargeable Battery



System components

Your Smart Jacket is just one part of a system designed to provide you with a wide range of communication features. Every component of the system is needed to enable these capabilities.

Your host computing device

Your notebook or PC hosts the Smart Jacket and runs the communication software: your web browser or email application and Connection Manager—the Smart Jacket enabling software.

You may also have other software on your computer that can be used wirelessly with the Smart Jacket, such as: file transfer applications (FTP), chat or instant messaging, a VPN (Virtual Private Network) client, client software for a corporate server application.



The Smart Jacket

The Smart Jacket provides your computer with a connection to the GSM/WCDMA wireless network. Every GSM network operates on one of four radio frequency bands (850MHz, 900MHz and 1800/1900MHz) and WCDMA for three frequency bands(850MHz, 1900MHz and 2100Mhz). The Smart Jacket is available in five configurations:

A GSM/WCDMA service provider account

Companies that operate GSM/WCDMA networks and provide access to these networks are called service providers. To use the Smart Jacket, you must have an account with a GSM/WCDMA service provider.

Each service provider has its own pricing options. There may be flat rate accounts, which provide you a maximum number of minutes of network usage for a fixed monthly fee. There may be accounts for which you are charged for network usage by the minute or by the amount of data transmitted.

Each Modem has been provisioned at the factory for use with a particular service provider. This sets the Smart Jacket to use particular radio channels and enables services specific for that provider.

The process of setting up your account is called activation. Activation involves action by the service provider and configuration of the Smart Jacket.

The WCDMA wireless network

This is the worldwide infrastructure providing the radio coverage that allows you to stay connected. Made up of radio towers and a variety of network switches, routers, and servers, the network is an interconnection of many service providers.

Note: More information about WCDMA networks is available on the WCDMA Development Group web site, www.cdg.org.

There are WCDMA networks that operate in the frequency bands supported by the Smart Jacket throughout North America and parts of Latin America, Asia, and Europe. However, each service provider operates a network that covers a limited geographical area within the overall WCDMA coverage area.

Note: Some service providers have coverage maps on their web sites.



Connecting and Configuring your Smart Jacket

The Smart Jacket has been provisioned at the factory for use with a particular service provider. This sets the Smart Jacket to use particular radio channels and enables services specific for that provider.

You will have access to more advanced features of the Smart Jacket such as Wi-Fi configuration, and password management.

This chapter provides the step-by-step process to access the Smart Jacket.

Step 1 | Connect to the Smart Jacket

- 1.1. Shut down any programs that are running on your computer at this time.
- 1.2. Make sure you have the following items at the computer that is going to be the main connection with the Smart Jacket. **DO NOT CONNECT THE SMART JACKET AT THIS TIME.**
 - The Smart Jacket
 - The Smart Jacket's Power Supply
- 1.3. Turn off any firewall or Internet-connection-sharing software on your computer.

Step 2 | Set up the Hardware

- 2.1. Make sure your Smart Jacket is not connected to any power source and all the LEDs are OFF.
- 2.3. Locate the power supply that is included with your Smart Jacket. Plug the power supply's small connector into the power port on the Smart Jacket. Plug the power supply into an empty power outlet.
- 2.3. Switch on the Smart Jacket. Look at the Power LED on top of the Smart Jacket and make sure the lights are ON.
- 2.4. Wait for a few seconds for the Smart Jacket to search for service network. Once the Smart Jacket finds a suitable network, observe the EU230 Signal LED turns to Red, Yellow or Blue depending on the strength of acquired signal. Refer to the Signal Strength LED description for more details.



- 2.5 Open your wireless interface of your PC. Then try to find the SSID "SJE10". Then, please associate to that SSID. Then you could configure the SJE10 through WEB Browser by enter the <http://192.168.1.1> to the browser.

Step 3 | Preparing your PC

Your Smart Jacket's Wireless is configured with DHCP by default. This means that IP address of your PC is automatically assigned by the Smart Jacket. Make sure that your PC has the correct TCP/IP setting for its "Local Area Connection" by following the steps below.



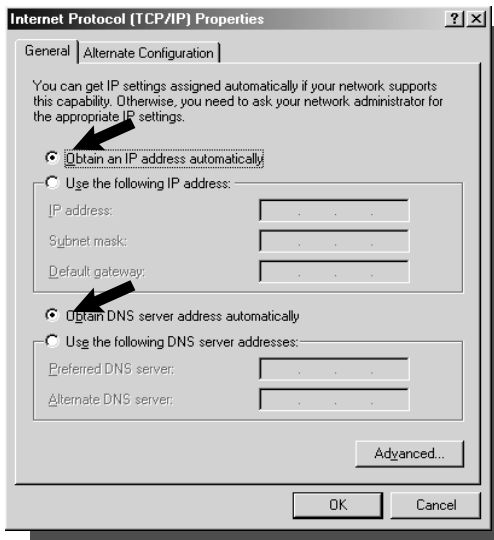
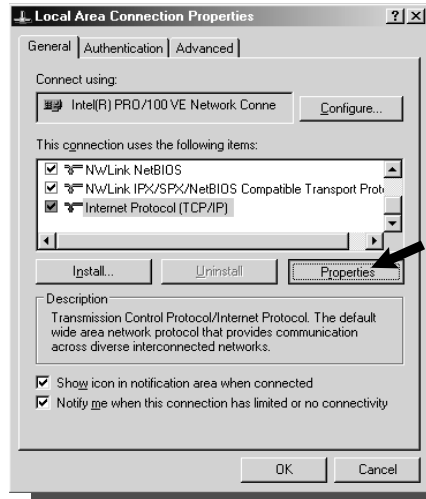
- 3.1 Click "Start", select "Connect To" and scroll down to "Show all connections" and left click it.

- 3.2 Right click "Local Area Connection" scroll down to "Properties" and left click it



3.3 Select the “Internet Protocol (TCP/IP)”. Press the “Properties” button.

If there is no TCP/IP line listed, you will need to install TCP/IP first.



3.4 Check “Obtain an IP address automatically”

3.5 Check “Obtain DNS Server address automatically”

3.6 Click Ok to exit Properties

3.7 If asked to re-start the PC, click “YES”.



Web Manager User Interface

The Web Manager User Interface is a web-based tool that you can use to set up the Smart Jacket if you don't want to use the default setting of Install CD. You can also use it to manage advanced functions of the Smart Jacket. From the User Interface, you can perform the following tasks:

- View the Smart Jacket's current settings and status
- Configure the Smart Jacket's router function to connect to your Service Provider with the settings that they provided you
- Change the current network settings such as the Internal IP address, the IP address pool, DHCP settings, and more
- Set the Smart Jacket's firewall to work with specific applications (port forwarding)
- Set up security features such as client restrictions, MAC address filtering, WEP, and WPA
- Change the Smart Jacket's internal password
- Reboot the Smart Jacket
- Back up your configuration settings
- Reset the Smart Jacket to factory default settings.
- Update the Smart Jacket's firmware

Before you use the Advanced User Interface, you will need to have a **User Name** and **Password** of the Smart Jacket. Please contact your Service Provider to obtain them.

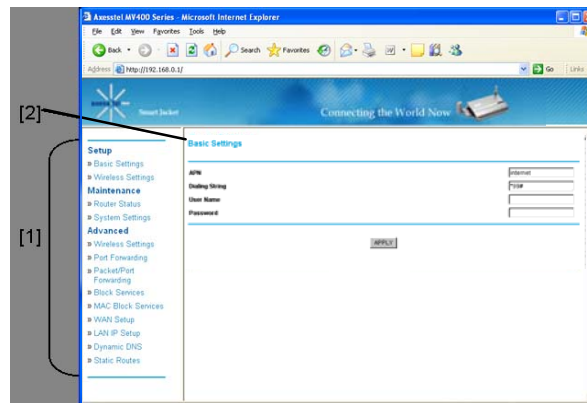
Step 1 | Access Network Setup

- 1.1. Connect the PC to your Smart Jacket using through the wireless interface. Associate the SSID "SJE10" and get the IP by DHCP setting of PC.
- 1.2 Then enter the <http://192.168.1.1> to your WEB Browser. Enter the User Name and Password then click "OK". The pop up window will change to a web-based window



Step 2 | Navigate web-based UI

- 2.1 The Basic Setting page is the first page you will see when you access the web based Advanced User Interface (UI). The basic setting page shows you a quick view of the Smart Jacket's login setting. All advanced setup pages can be reached from this page.



1. Quick Navigation Links

You can go directly to any of the Smart Jacket's UI pages by clicking directly on these links. The links are divided into logical categories and grouped by tabs to make finding a particular setting easier to find.



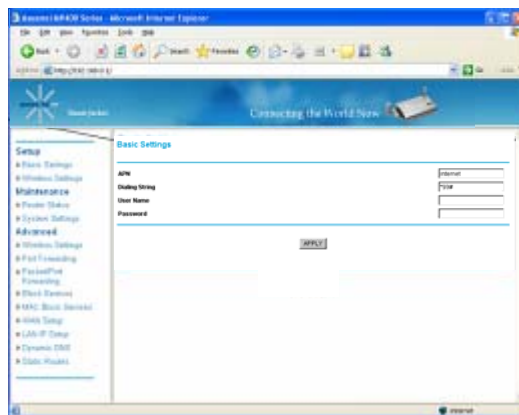
2. Page Name

The page you are on can be identified by this name. This User Manual will sometimes refer to pages by name. For instance “Advanced > LAN IP Setup” refers to the “LAN IP Setup” page.

Basic Settings

Clicking on the header of the “Basic Settings” tab will take you to the “Basic Settings” header page. From this page, the Smart Jacket’s basic settings can be modified. These settings include:

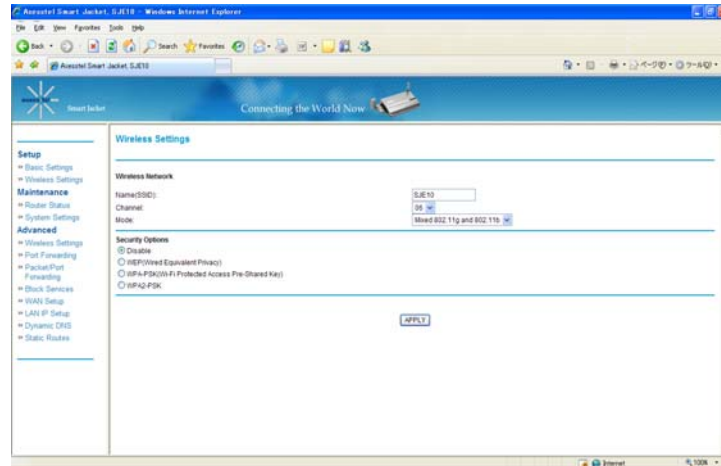
- APN: default value is “internet”
- Dialing String: default value is “*99#”
- Username: no default value; end user could key in username if that is necessary.
- Password: no default value; end user could key in password if that is necessary.





Configuring the Wireless Network Settings SJE10(Smart Jacket) only

Clicking on the header of the “Wireless Settings” tab will take you to the “Wireless Settings” header page. From this page, the Smart Jacket’s Wi-Fi router wireless radio can be enabled or disabled (the default setting is enabled). There are options that allow you to make changes to the Wi-Fi wireless network settings.



Changing the Wireless Network Name (SSID)

To identify your wireless network, a name called the SSID (Service Set Identifier) is used. The default SSID of the Smart Jacket is “SJE10”. You can change this to anything you want to or you can leave it unchanged. If there are other wireless networks operating in your area, you will want to make sure that your SSID is unique (does not match that of another wireless network in the area). To change the SSID, type in the SSID that you want to use in the “SSID” field and click “Apply Changes”. The change is immediate. If you make a change to the SSID, your wireless-equipped computers may also need to be reconfigured to connect to your new network name. Refer to the documentation of your wireless network adapter for information on making this change.

Using the Wireless Mode Switch



Your Smart Jacket can operate in three different wireless modes: “g and b”, “g only”, and “b only”.

g and b Mode

In this mode, the Smart Jacket is compatible with 802.11b and 802.11g wireless clients simultaneously. This is the factory default mode and ensures successful operation with all Wi-Fi compatible devices. If you have a mix of 802.11b and 802.11g clients in your network, we recommend setting the Smart Jacket to g and b mode. This setting should only be changed if you have a specific reason to do so.

g only Mode

g only mode works with 802.11g clients only. This mode is recommended only if you want to prevent 802.11b clients from accessing your network. To switch modes, select the desired mode from the “Wireless Mode” drop-down box. Then, click “Apply Changes”.

b only Mode

We recommend you DO NOT use this mode unless you have a very specific reason to do so. This mode exists only to solve unique problems that may occur with some 802.11b client adapters and is NOT necessary for interoperability of 802.11g and 802.11b standards.

When to use b only Mode

In some cases, older 802.11b clients may not be compatible with 802.11g wireless. These adapters tend to be of inferior design and may use older drivers or technology. Switching to this mode can solve problems that sometimes occur with these clients. If you suspect that you are using a client adapter that falls into this category of adapters, first check with the adapter vendor to see if there is a driver update. If there is no driver update available, switching to b only mode may fix your problem. Please note that switching to b only mode will decrease 802.11g performance.

Changing the Wireless Channel

There are a number of operating channels you can choose from. In the United States and Australia, there are 11 channels. In the United Kingdom and most of Europe, there are 13 channels. In a small number of other countries, there are other channel requirements. Your Smart Jacket is configured to operate on the proper channels for the country you reside in. The default channel is 11 (unless you are in a country that does not allow channel 11). The channel can



be changed if needed. If there are other wireless networks operating in your area, your network should be set to operate on a channel that is different than the other wireless networks. For best performance, use a channel that is at least five channels away from the other wireless network. For instance, if another network is operating on channel 11, then set your network to channel 6 or below. To change the channel, select the channel from the drop-down list. Click “Apply Changes”. The change is immediate.

Securing your Wi-Fi® Network

Here are a few different ways you can maximize the security of your wireless network and protect your data from prying eyes and ears. This section is intended for the home, home office, and small office user. At the time of this User Manual’s publication, there are two encryption methods available.

WEP (Wired Equivalent Privacy)

WEP (Wired Equivalent Privacy) is a common protocol that adds security to all Wi-Fi compliant wireless products. WEP was designed to give wireless networks the equivalent level of privacy protection as a comparable wired network.

WPA (Wi-Fi Protected Access)

WPA (Wi-Fi Protected Access) is a new Wi-Fi standard that was designed to improve upon the security features of WEP. To use WPA security, the drivers and software of your wireless equipment must be upgraded to support WPA. These updates will be found on the wireless vendor’s website. There are two types of WPA security, WPA-PSK (no server) and WPA (with radius server).

WPA-PSK (no server) uses what is known as a pre-shared key as the network key. A network key is basically a password that is between eight and 63 characters long. It can be a combination of letters, numbers, or characters. Each client uses the same network key to access the network. Typically, this is the mode that will be used in a home environment.

Maintenance: Router Status

Clicking on the header of the “Router Status” tab will take you to the “Router Status” header page. A quick description of the functions can be found here.

1. IP Address

The “IP address” is the internal IP address of the Smart Jacket. The default IP address is “192.168.1.1”. To access the web based Advanced User Interface,



type this IP address into the address bar of your browser. This address can be changed if needed.

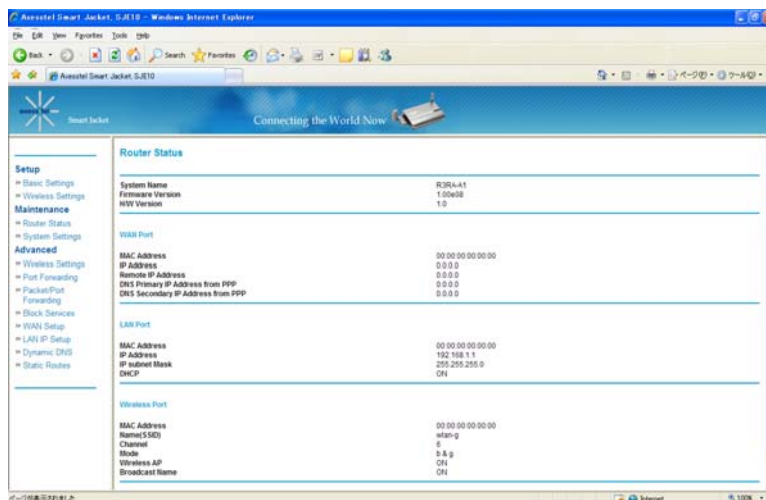
2. Subnet Mask

This is a unique, advanced feature of your Axesstel Smart Jacket. It is possible to change the subnet mask if necessary; however, do NOT make changes to the subnet mask unless you have a specific reason to do so. The default setting is “255.255.255.0”.

From this page, users can see all settings associated with the Smart Jacket’s router network functions. These functions include:

- Account Name and Firmware Version
- WAN Port: MAC Address, IP Address, DHCP choice, IP Subnet Mask and Domain Name Server Address
- LAN Port: MAC Address, IP Address, DHCP choice and IP Subnet Mask
- Wi-Fi Port *: SSID, Region, Channel, Mode, Wireless AP status (ON/OFF) and Broadcast Name status (ON/OFF)

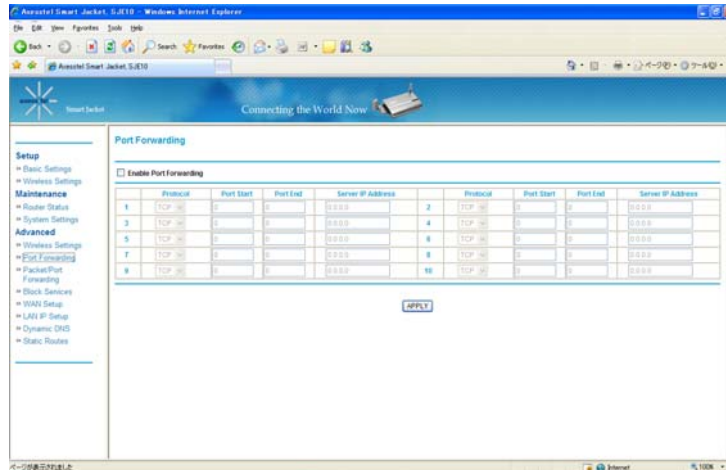
Users can click the button “Show Statistic” to see a graphic display of the router performance.





Configuring Port Forwarding

Clicking on the header of the “Port Forwarding” tab will take you to the “Port Forwarding” header page. This function will allow you to route external (Internet) calls for services such as a web server (port 80), FTP server (Port 21), or other applications through your Router to your internal network. Since your internal computers are protected by a firewall, computers outside your network (over the Internet) cannot get to them because they cannot be “seen.” A list of common applications has been provided in case you need to configure the “Port Forwarding” function for a specific application. You will need to contact the application vendor to find out which port settings you need.



Note: This advanced feature should be employed by advanced users only.

Disable Port Forwarding

To disable Port Forwarding, uncheck the box “Enable Port Forwarding”.

Entering Settings into the Port Forwarding

To enter settings, select the service from the dropdown box “Protocol”. You will see a list of common applications (FTP, HTTP, Net-Meeting...). Select the desired applications, enter the IP address and the port number in the space provided for the internal (server) machine and click “Apply”. Opening ports in your firewall can pose a security risk. You can enable and disable settings very



quickly. It is recommended that you disable the settings when you are not using a specific application.

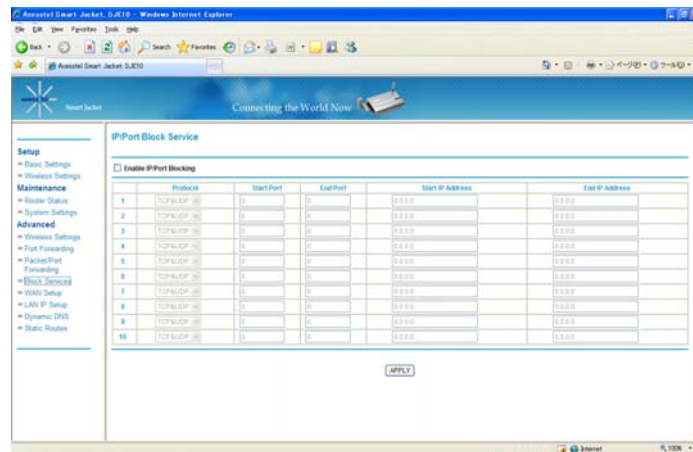
Block Services

The Smart Jacket can be configured to restrict access to the Internet, email, or other network services at specific days and times. Restriction can be set for a single computer, a range of computers, or multiple computers.

To restrict Internet access to a single computer, for example, enter the IP address of the computer you wish to restrict access to in the IP fields. Next, enter “80” in both the port fields. Select “Block”.

MAC Block Services

The MAC address filter is a powerful security feature that allows you to specify which computers are allowed on the network. Any computer attempting to access the network that is not specified in the filter list will be denied access. When you enable this feature, you must enter the MAC address of each client (computer) on your network to allow network access to each.



MAC Services Blocking can be set in three modes.

- Disable. In this mode, there is no restriction to any device connected to the Smart Jacket whether it is through Wi-Fi.



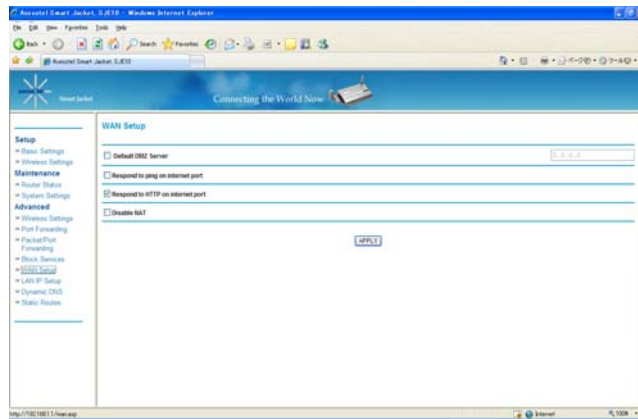
- Deny. In this mode, the service table shows the client MAC address being blocked by the Smart Jacket.
- Allow. In this mode, the service table shows the client MAC address allowed by the Smart Jacket.

To modify the service table (i.e. to add, change address or remove clients) simply enter the correct value and click “Apply”.

Note: You will not be able to delete the MAC address of the computer you are using to access the Router’s administrative functions (the computer you are using now).

WAN Setup

Clicking on the header of the “WAN Setup” tab will take you to the “WAN Setup” header page. From this page, Internet Ping and HTTP can be enabled or disabled.



WAN Ping Blocking

Computer hackers use what is known as “pinging” to find potential victims on the Internet. By pinging a specific IP address and receiving a response from the IP address, a hacker can determine that something of interest might be there. The Smart Jacket can be set up so it will not respond to an ICMP ping from the outside. This heightens the level of security of your Smart Jacket.

To turn OFF the ping response, select “Not Respond to Ping on Internet Port” and click “Apply”. The Smart Jacket will not respond to an ICMP ping.

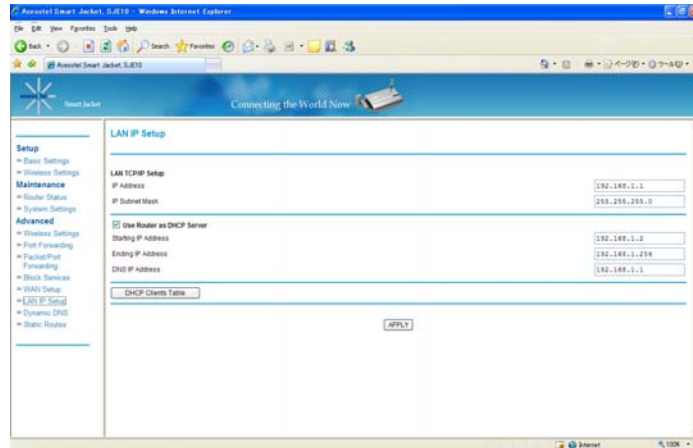


HTTP Ping Blocking

To turn OFF the HTTP response, select “Not Respond to HTTP on Internet Port” and click “Apply”. The Smart Jacket will not respond to an HTTP ping.

LAN IP Setup

Clicking on the header of the “LAN IP Setup” tab will take you to its header page.



LAN TCP/IP Setup

All settings for the internal LAN setup of the Router can be viewed and changed here.

- 1. IP Address:** The “IP address” is the internal IP address of the Smart Jacket. The default IP address is “192.168.1.1”. To access the Web Manager User Interface, type this IP address into the address bar of your browser. This address can be changed if needed. To change the IP address, type in the new IP address and click “Apply”. The IP address you choose should be a non-routable IP.

Examples of a non-routable IP are:

- 192.168.x.x (where x is anything between 0 and 255), and
- 10.x.x.x (where x is anything between 0 and 255).

- 2. Subnet Mask:** There is no need to change the subnet mask. This is a unique, advanced feature of your Smart Jacket. It is possible to change the



subnet mask if necessary; however, do NOT make changes to the subnet mask unless you have a specific reason to do so. The default setting is "255.255.255.0".

Use Router as DHCP Server

The DHCP server function makes setting up a network very easy by assigning IP addresses to each computer on the network automatically. The DHCP server can be turned OFF if necessary; however, in order to do so you must manually set a static IP address for each computer on your network. To turn off the DHCP server, de-select "Use Router As DHCP Server" and click "Apply".

Static Route

A static IP address connection type is less common than other connection types. If your ISP uses static IP addressing, you will need your IP address, subnet mask, and ISP gateway address. This information is available from your ISP or on the paperwork that your ISP left with you. Type in your information, and click "Apply".

- 1. IP Address:** Provided by your ISP. Enter your IP address here.
- 2. Subnet Mask:** Provided by your ISP. Enter your subnet mask here.
- 3. ISP Gateway Address:** Provided by your ISP. Enter the ISP gateway address here.



Technical Specifications

This chapter provides technical product data for the Smart Jacket.

Radio frequency and electrical specifications

3.5G Frequency Range	Follow the EU230	Tri-band UMTS: 2100/ 1900/ 850 MHz (Band I/ II/V)
		Quad-band GSM / GPRS / EDGE: 850 / 900 / 1800 / 1900 MHz
3.5G Channel Bandwidth		WCDMA 5 MHz
WiFi Channel		802.11 b/g US/Canada: 11 (1 ~ 11) Major European country: 13 (1 ~ 13) France: 4 (10 ~ 13) Japan: 11b: 14 (1~13 or 14 th), 11g: 13 (1 ~ 13) China: 13 (1 ~ 13)
External appearance (mm)		136 x 95 x 28 mm
Weight		550g (with battery/full packings)
Temperature of operation		-10 ~ +50 degrees Celsius
Relative humidity		5% ~ 90%
Adapter		Input: AC 110~240V 50~60Hz Output: DC 5V/3A
Battery	Operation	4 Hrs



Appendix A: Glossary

HSDPA	Provides improved down-link performance of up to 14.4 Mbit/s theoretically. Existing deployments provide up to 7.2 Mbit/s in down-link. Up-link performance is a maximum of 384 kbit/s. Part of 3GPP/UTRAN-FDD Release 5 WCDMA specifications
HSUPA	Provides improved up-link performance of up to 5.76 Mbit/s theoretically. Standardized as part of 3GPP Release 6.
bps	bits per second—The actual data speed over the transmission medium.
WCDMA	W-CDMA (Wideband Code Division Multiple Access) is a type of 3G cellular network. W-CDMA is the higher speed transmission protocol used in the Japanese FOMA system and in the UMTS system, a third generation follow-on to the 2G GSM networks deployed worldwide.
dormant	The packet data connection has the logical PPP session left open while the underlying physical link (the radio channel) is released. When traffic is to resume, a radio channel is reacquired and the original PPP session resumes.
FCC	Federal Communications Commission. The U.S. federal agency that is responsible for interstate and foreign communications. The FCC regulates commercial and private radio spectrum management, sets rates for communications services, determines standards for equipment, and controls broadcast licensing. Consult www.fcc.gov .
firmware	Software stored in ROM or EEPROM; essential programs that remain even when the system is turned off. Firmware is easier to



change than hardware but more permanent than software stored on disk.

host	<ol style="list-style-type: none">1. A computer that uses a modem or a similar device to answer a calling computer.2. A source or destination in the communication network.3. A computer that contains data or files to be accessed by client computers. Also known as a server.
IS	Interim Standard—After receiving industry consensus, the TIA forwards the standard to ANSI for approval.
IS-95	The standard for CDMA
Kbps	Kilobits per second—Actually 1000, not 1024, as used in computer memory size measurements of kilobytes.
LAN	Local Area Network
LED	Light Emitting Diode—A semiconductor diode that emits visible or infrared light.
MEID	Mobile Equipment Identifier—The unique second-generation serial number assigned to the Smart Jacket for cellular network use. Compare to ESN.
MHz	Mega Hertz—One million cycles per second.
Mbps	Megabits per second
packet	A short fixed-length block of data including a header that is transmitted as a unit in a communications network.
PCS	Personal Communications Services—A cellular communication infrastructure that uses a different frequency range than AMPS.
roaming	A cellular subscriber is in an area where service is obtained from a cellular service provider that is not the subscriber's provider.
SMS	Short message services—A feature that allows users of a wireless device on a wireless network to receive or transmit short electronic alphanumeric messages (up to 160 characters, depending on the service provider).



system tray

Usually located in the lower right corner of your screen

TIA Telecommunications Industry Association—A standards-setting trade organization, whose members provide communications and information technology products, systems, distribution services and professional services in the United States and around the world. Consult www.tiaonline.org.

FCC IMPORTANT NOTICE:

External WAN Mini Express Card limitation The WAN Mini Express Card slot of this Axesstel Mobile Router will only collocated with this Mini Express Card Wireless Network Card model :Axesstel EU230(FCC ID:PH7EU230) manufactured by Axesstel, and may not be collocated with any other radio cards.

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.

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

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.

