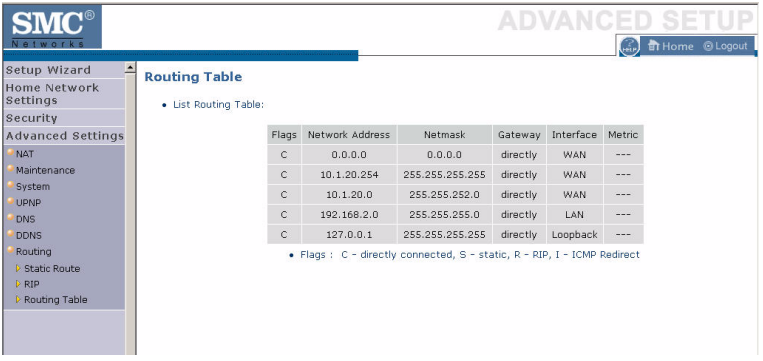
Parameter	Description
Version	Sets the RIP (Routing Information Protocol) version to use on this interface.
Poison Reverse	A method for preventing loops that would cause endless retransmission of data traffic.
Authentication Required	None: No authentication. Password: A password authentication key is included in the packet. If this does not match what is expected, the packet will be discarded. This method provides very little security as it is possible to learn the authentication key by watching RIP packets.
Authentication Code	Password Authentication key.

When a router receives a routing update that includes changes to an entry, it updates its routing table to reflect the new route. RIP routers maintain only the best route to a destination. After updating its routing table, the router immediately begins transmitting routing updates to inform other network routers of the change.

Click **Save Settings** to proceed, or **Cancel** to change your settings.

Routing Table

Click **Routing Table** to view the screen below.



Parameter	Description
Flags	Indicates the route status: C = Direct connection on the same subnet. S = Static route. R = RIP (Routing Information Protocol) assigned route. I = ICMP (Internet Control Message Protocol) Redirect route.
Network Address	Destination IP address.
Netmask	The subnetwork associated with the destination. This is a template that identifies the address bits in the destination address used for routing to specific subnets. Each bit that corresponds to a "1" is part of the subnet mask number; each bit that corresponds to "0" is part of the host number.
Gateway	The IP address of the router at the next hop to which frames are forwarded.
Interface	The local interface through which the next hop of this route is reached.
Metric	When a router receives a routing update that contains a new or changed destination network entry, the router adds 1 to the metric value indicated in the update and enters the network in the routing table.

APPENDIX A
TROUBLESHOOTING

This section describes common problems you may encounter and possible solutions to them. The Barricade can be easily monitored through panel indicators to identify problems.

Troubleshooting Chart	
Symptom	**Action**
LED Indicators	
Power LED is off	• Check connections between the Barricade, the external power supply, and the wall outlet. • If the power indicator does not turn on when the power cord is plugged in, you may have a problem with the power outlet, power cord, or external power supply. However, if the unit powers off after running for a while, check for loose power connections, power losses, or surges at the power outlet. If you still cannot isolate the problem, then the external power supply may be defective. In this case, contact Technical Support for assistance.

Troubleshooting Chart	
Symptom	**Action**
LED Indicators	
LAN LED is Off	• Verify that the Barricade and attached device are powered on. • Be sure the cable is plugged into both the Barricade and the corresponding device. • Verify that the proper cable type is used and that its length does not exceed the specified limits. • Be sure that the network interface on the attached device is configured for the proper communication speed and duplex mode. • Check the adapter on the attached device and cable connections for possible defects. Replace any defective adapter or cable if necessary.
Network Connection Problems	
Cannot ping the Barricade from the attached LAN, or the Barricade cannot ping any device on the attached LAN	• Verify that the IP addresses are properly configured. For most applications, you should use the Barricade's DHCP function to dynamically assign IP addresses to hosts on the attached LAN. However, if you manually configure IP addresses on the LAN, verify that the same network address (network component of the IP address) and subnet mask are used for both the Barricade and any attached LAN devices. • Be sure the device you want to ping (or from which you are pinging) has been configured for TCP/IP.

Troubleshooting Chart	
Symptom	**Action**
Management Problems	
Cannot connect using the web browser	• Be sure to have configured the Barricade with a valid IP address, subnet mask, and default gateway. • Check that you have a valid network connection to the Barricade and that the port you are using has not been disabled. • Check the network cabling between the management station and the Barricade.
Forgot or lost the password	• Press the **Reset** button on the rear panel (holding it down for at least six seconds) to restore the factory defaults.

Troubleshooting Chart	
Symptom	**Action**
Wireless Problems	
A wireless PC cannot associate with the Barricade.	• Make sure the wireless PC has the same SSID settings as the Barricade. See "Channel and SSID" on page 4-24. • You need to have the same security settings on the clients and the Barricade. See "Security" on page 4-27.
The wireless network is often interrupted.	• Move your wireless PC closer to the Barricade to find a better signal. If the signal is still weak, change the angle of the antenna. • There may be interference, possibly caused by microwave ovens or wireless phones. Change the location of the possible sources of interference or change the location of the Barricade. • Change the wireless channel on the Barricade. See "Channel and SSID" on page 4-24. • Check that the antenna, connectors, and cabling are firmly connected.
The Barricade cannot be detected by a wireless client.	• The distance between the Barricade and wireless PC is too great. • Make sure the wireless PC has the same SSID and security settings as the Barricade. See "Channel and SSID" on page 4-24 and "Security" on page 4-27.

APPENDIX B
CABLES

Ethernet Cable

Caution: Do not plug a phone jack connector into an RJ-45 port. For Ethernet connections, use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Specifications

Cable Types and Specifications			
Cable	Type	Max. Length	Connector
10BASE-T	Cat. 3, 4, 5 100-ohm UTP	100 m (328 ft)	RJ-45
100BASE-TX	Cat. 5 100-ohm UTP	100 m (328 ft)	RJ-45

Wiring Conventions

For Ethernet connections, a twisted-pair cable must have two pairs of wires. Each wire pair is identified by two different colors. For example, one wire might be red and the other, red with white stripes. Also, an RJ-45 connector must be attached to both ends of the cable.

Each wire pair must be attached to the RJ-45 connectors in a specific orientation. The following figure illustrates how the pins on an Ethernet RJ-45 connector are numbered. Be sure to hold the connectors in the same orientation when attaching the wires to the pins.

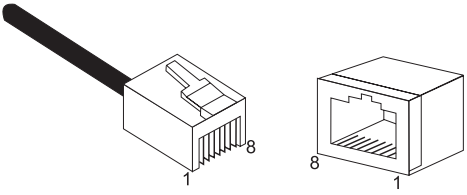


Figure B-1. RJ-45 Ethernet Connector Pin Numbers

RJ-45 Port Ethernet Connection

Use the straight-through CAT -5 Ethernet cable provided in the package to connect the Barricade to your PC. When connecting to other network devices such as an Ethernet switch, use the cable type shown in the following table.

Attached Device Port Type	Connecting Cable Type
MDI-X	Straight-through
MDI	Crossover

Pin Assignments

With 10BASE-T/100BASE-TX cable, pins 1 and 2 are used for transmitting data, and pins 3 and 6 for receiving data.

RJ-45 Pin Assignments	
Pin Number	Assignment*
1	Tx+
2	Tx-
3	Rx+
6	Rx-

* The "+" and "-" signs represent the polarity of the wires that make up each wire pair.

Straight-Through Wiring

If the port on the attached device has internal crossover wiring (MDI-X), then use straight-through cable.

Straight-Through Cable Pin Assignments	
End 1	End 2
1 (Tx+)	1 (Tx+)
2 (Tx-)	2 (Tx-)
3 (Rx+)	3 (Rx+)
6 (Rx-)	6 (Rx-)

Crossover Wiring

If the port on the attached device has straight-through wiring (MDI), use crossover cable.

Crossover Cable Pin Assignments	
End 1	End 2
1 (Tx+)	3 (Rx+)
2 (Tx-)	6 (Rx-)
3 (Rx+)	1 (Tx+)
6 (Rx-)	2 (Tx-)

APPENDIX C
SPECIFICATIONS

IEEE Standards
IEEE 802.3 10 BASE-T Ethernet
IEEE 802.3u 100 BASE-TX Fast Ethernet
IEEE 802.3, 802.3u, 802.11g, 802.1D
ITU G.dmt
ITU G.Handshake
ITU T.413 issue 2 - ADSL full rate

LAN Interface
4 RJ-45 10 BASE-T/100 BASE-TX ports
Auto-negotiates the connection speed to 10 Mbps Ethernet or 100 Mbps Fast Ethernet, and the transmission mode to half-duplex or full-duplex

WAN Interface
1 ADSL RJ-45 port

Indicator Panel
LAN 1~4, WLAN, PPPoE/DSL, WAN, Power

Dimensions
145 x 95 x 36 mm (5.70 x 3.74 x 1.41 in)

Weight
0.175 kg (0.469 lbs)

Input Power
9 V 1 A

Power Consumption
9 Watts maximum

Advanced Features
Dynamic IP Address Configuration – DHCP, DNS, DDNS
Firewall – Client privileges, hacker prevention and logging, Stateful Packet Inspection
Virtual Private Network – PPTP, IPSec pass-through, VPN pass-through, VLAN Ping

Internet Standards
RFC 826 ARP, RFC 791 IP, RFC 792 ICMP, RFC 768 UDP, RFC 793 TCP, RFC 783 TFTP, RFC 1483 AAL5 Encapsulation, RFC 1661 PPP, RFC 1866 HTML, RFC 2068 HTTP, RFC 2364 PPP over ATM

Radio Features

Wireless RF module Frequency Band
802.11g Radio: 2.4GHz
802.11b Radio: 2.4GHz
USA - FCC
2412~2462MHz (Ch1~Ch11)
Canada - IC
2412~2462MHz (Ch1~Ch11)
Europe - ETSI
2412~2472MHz (Ch1~Ch13)
Japan - STD-T66/STD-33
2412~2484MHz (Ch1~Ch14)

Modulation Type
OFDM, CCK

Operating Channels IEEE 802.11b Compliant:
11 channels (US, Canada)
13 channels (ETSI)
14 channels (Japan)

Operating Channels IEEE 802.11g Compliant:
13 channels (US, Canada, Europe, Japan)

RF Output Power Modulation Rate-Output Power (dBm)

802.11b - 1Mbps 16
802.11b - 2Mbps 16
802.11b - 5.5Mbps 16
802.11b - 11Mbps 16

Modulation Rate-Output Power (dBm)

802.11g - 6Mbps 15
802.11g - 9Mbps 15
802.11g - 12Mbps 15
802.11g - 18Mbps 15
802.11g- 24Mbps 15
802.11g - 36Mbps 15
802.11g- 48Mbps 15
802.11g - 54Mbps 15

Sensitivity Modulation Rate-Receiver 2.412 ~ 2.484 HGz Sensitivity (dBm)

802.11b - 1Mbps -90
802.11b - 2Mbps -88
802.11b - 5.5Mbps -85
802.11b- 11Mbps -84

Modulation Rate-Receiver Sensitivity Typical (dBm)

802.11g - 6Mbps -88
802.11g - 9Mbps -87
802.11g - 12Mbps -84
802.11g - 18Mbps -82
802.11g - 24Mbps -79
802.11g - 36Mbps -75
802.11g - 48Mbps -68
802.11g - 54Mbps -68

Standards Compliance

Safety
TÜV

Environmental
CE Mark

Temperature
Operating 0 to 40 °C (32 to 104 °F)
Storage -40 to 70 °C (-40 to 158 °F)

Humidity
5% to 95% (non-condensing)

Vibration
IEC 68-2-36, IEC 68-2-6

Shock
IEC 68-2-29

Drop
IEC 68-2-32

FOR TECHNICAL SUPPORT, CALL:
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support@smc-asia.com

Driver updates:
http://www.smc.com/index.cfm?action=tech_support_drivers_downloads
http://www.smc-asia.com/index.php?option=com_downloads&Itemid=50)

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India:	91-11-51436361/62	Fax 91-11-51601838
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