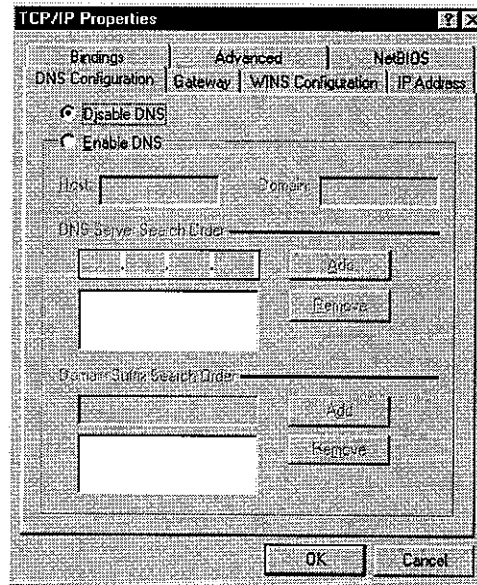
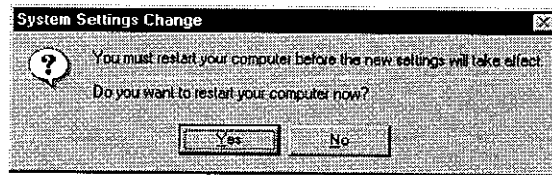


7. Click the "DNS Configuration" tab. Locate the DNS servers listed under "DNS Server Search Order." Record the listed addresses.
8. After writing down your settings, check to make sure you have recorded them correctly. Click the "IP Address" tab and then click "Obtain an IP address automatically." Click OK.



9. Windows may need your Windows 95/98/ME CD to copy some files. After it finishes copying, it will then prompt you to restart your system. Click "Yes" and your computer will shut down and restart.



TCP/IP Configuration Setting

IP Address _____

Subnet Mask _____

Primary DNS Server _____

Secondary DNS Server _____

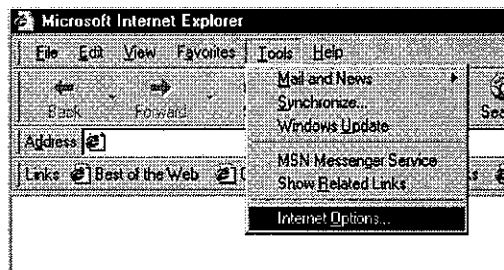
Default Gateway _____

Step 2. Disable HTTP Proxy

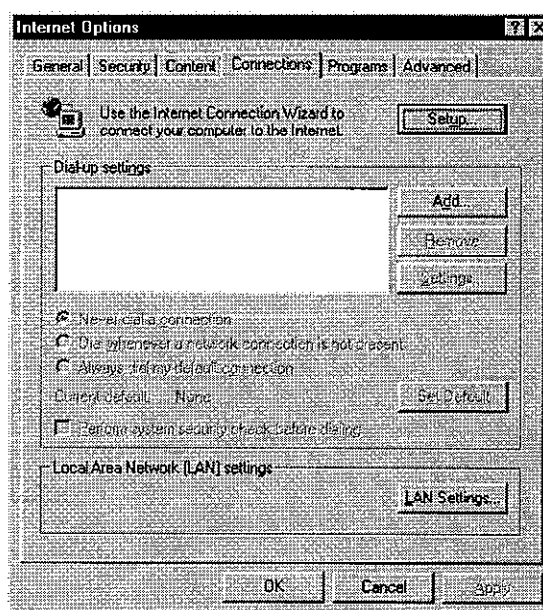
You will need to verify that the "HTTP Proxy" feature of your Web browser is disabled. This is so that your Web browser will be able to view the configuration pages inside your Barricade Plus. The following steps are for Internet Explorer and for Netscape. Determine which browser you use and follow the appropriate steps.

Internet Explorer

1. Open Internet Explorer and click the stop button. Click "Tools," then "Internet Options."

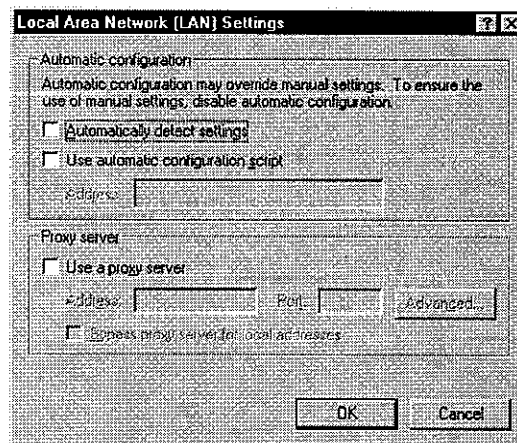


2. In the "Internet Options" window click the "Connections" tab. Next, click the "LAN Settings..." button.



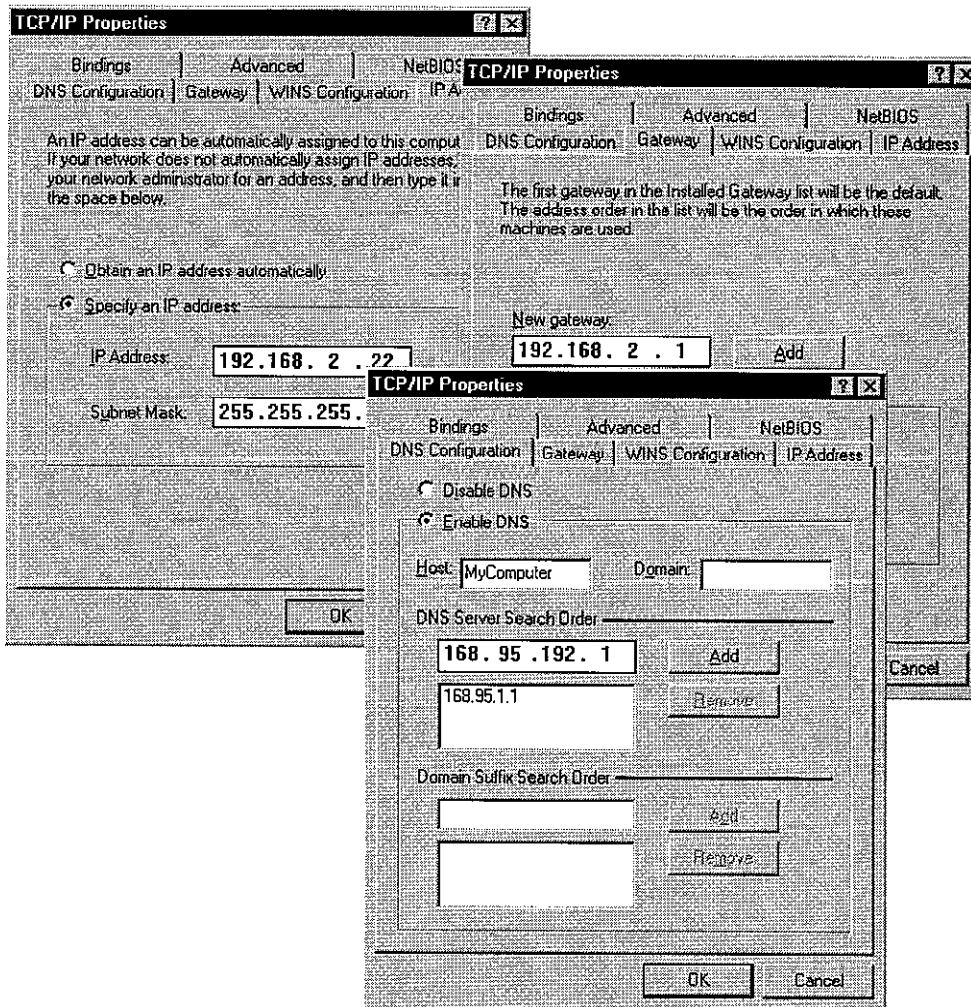
3. Clear all the checkboxes.

4. Click "OK," and then click "OK" again to close the "Internet Options" window.



Manual IP Configuration

1. Select "Specify an IP address" in the "IP Address" tab. Select an IP address based on the default network 192.168.2.X (where X is between 1 and 254), and use 255.255.255.0 for the Subnet Mask.
2. In the "Gateway" tab, add the IP address of the Barricade Plus (default: 192.168.2.1) in the "New gateway" field and click "Add."
3. In the "DNS Configuration" tab, add the IP address for the Barricade Plus and click "Add." This automatically relays DNS requests to the DNS server(s) provided by your ISP. Otherwise, add specific DNS servers into the "DNS Server Search Order" field and click "Add."



4. After finishing TCP/IP setup, click “OK,” and then reboot the computer. After that, set up other PCs on the LAN according to the procedures described above.

Verifying Your TCP/IP Connection

After installing the TCP/IP communication protocol and configuring an IP address in the same network with the Barricade Plus, you can use the “Ping” command to check if your computer is successfully connected to the Barricade Plus. The following example shows how the Ping procedure can be executed in an MS-DOS window. First, execute the “Ping” command:

```
ping 192.168.2.1
```

If the following messages appear:

```
Pinging 192.168.2.1 with 32 bytes of data:  
Reply from 192.168.2.1: bytes=32 time=2ms TTL=64
```

a communication link between your computer and the Barricade Plus has been successfully established.

Otherwise, if you get the following messages:

```
Pinging 192.168.2.1 with 32 bytes of data:  
Request timed out.
```

there may be something wrong in your installation procedure. Check the following items in sequence:

1. Is the Ethernet cable correctly connected between the Barricade Plus and your computer?

The LAN LED on the Barricade Plus and the Link LED of the network card on your computer must be on.

SETTING TCP/IP TO WORK WITH THE BARRICADE PLUS

2. Is TCP/IP properly configured on your computer?

If the IP address of the Barricade Plus is 192.168.2.1, the IP address of your PC must be from 192.168.2.2 - 192.168.2.254 and the Default Gateway must be 192.168.2.1.

If you can successfully Ping the Barricade Plus, then you are now ready to connect to the Internet!

APPENDIX A

TROUBLESHOOTING

This appendix describes common problems you may encounter and possible solutions to them. The Barricade Plus can be easily monitored through panel indicators to identify problems. If you cannot resolve any connection problems after checking the indicators, then refer to the other sections in the following table.

Troubleshooting Chart	
Symptom	Action
<i>LED Indicators</i>	
Power LED is Off	<ul style="list-style-type: none">• External power supply has failed or is disconnected.• Check connections between the Barricade Plus, 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. <p>However, if the unit powers off after running for a while, check for loose power connections, power losses or surges at the power outlet.</p> <p>If you still cannot isolate the problem, then the external power supply may be defective. In this case, contact SMC Technical Support for assistance.</p>

Troubleshooting Chart	
Symptom	Action
<i>LED Indicators</i>	
Link LED is Off	<ul style="list-style-type: none"> • Verify that the Barricade Plus and attached device are powered on. • Be sure the cable is plugged into both the Barricade Plus 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.
<i>Network Connection Problems</i>	
Cannot Ping the Barricade Plus from the attached LAN, or the Barricade Plus cannot Ping any device on the attached LAN	<ul style="list-style-type: none"> • Verify that the IP addresses are properly configured. For most applications, you should use the Barricade Plus' DHCP function to dynamically assign IP addresses to any host on the attached LAN. However, if you manually configure any 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 Plus 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.
Mobile users cannot access the Wireless Barricade Plus	<ul style="list-style-type: none"> • Make sure that the Barricade Plus and all mobile users are configured to use the same radio channel, wireless domain (SSID), and encryption keys. • Ensure that all mobile users are within range of the Barricade Plus as specified in Appendix C.

Troubleshooting Chart	
Symptom	Action
<i>Management Problems</i>	
Cannot connect using the Web browser	<ul style="list-style-type: none"> • Be sure to have configured the Barricade Plus with a valid IP address, subnet mask and default gateway. • Check that you have a valid network connection to the Barricade Plus and that the port you are using has not been disabled. • Check the network cabling between the management station and the Barricade Plus.
Forgot or lost the password	<ul style="list-style-type: none"> • Press the Reset button on the front panel (holding it down for at least five seconds) to restore the factory defaults.

TROUBLESHOOTING

APPENDIX B

CABLES

Ethernet Cable

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

Twisted-pair Cable

Caution: DO-NOT plug a phone jack connector into any RJ-45 port. Use only twisted-pair cables with RJ-45 connectors that conform with FCC standards.

For 10BASE-T/100BASE-TX 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. All RJ-45 ports on the SMC7004FW, except for the WAN port, support automatic MDI/MDI-X configuration. This means that you can use straight-through cable to attach the LAN ports to any network device. However, when connecting the WAN port to a broadband modem, you will need to use either straight-through or crossover cable, depending on the port type used on the modem.

Figure B-1 illustrates how the pins on the RJ-45 connector are numbered. Be sure to hold the connectors in the same orientation when attaching the wires to the pins.

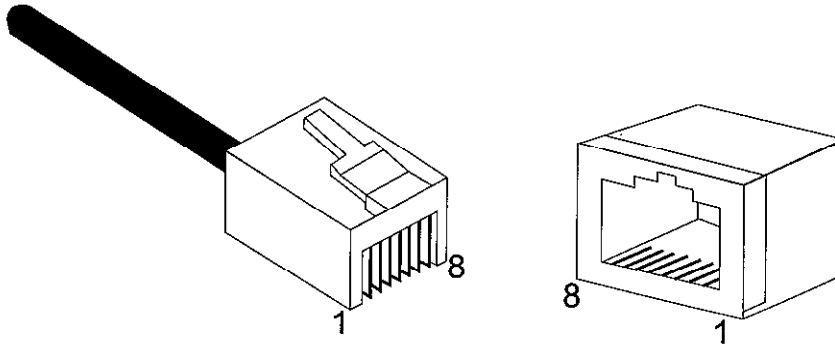


Figure B-1. RJ-45 Connector Pin Numbers

Straight-through Cable

Straight-Through RJ-45 Pin Assignments	
End 1	End 2
1 (TD+)	1 (TD+)
2 (TD-)	2 (TD-)
3 (RD+)	3 (RD+)
6 (RD-)	6 (RD-)

Pins 4, 5, 7 and 8 are not connected.

Crossover Cable

Crossover RJ-45 Pin Assignments	
End 1	End 2
1 (TD+)	3 (RD+)
2 (TD-)	6 (RD-)
3 (RD+)	1 (TD+)
6 (RD-)	2 (TD-)

Pins 4, 5, 7 and 8 are not connected.

RJ-45 Port Pin Assignments

All LAN ports on the Barricade Plus support automatic MDI/MDI-X configuration. This means that the pin signals in use will depend on whether the LAN port is operating in MDI or MDI-X mode. However, the WAN port is configured only for MDI-X mode.

Pin	MDI Signal Name*	MDI-X Signal Name*
1	Transmit Data (TD+)	Receive Data (RD+)
2	Transmit Data (TD-)	Receive Data (RD-)
3	Receive Data (RD+)	Transmit Data (TD+)
6	Receive Data (RD-)	Transmit Data (RD-)

Pins 4, 5, 7 and 8 are not connected.

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

CABLES

APPENDIX C

SPECIFICATIONS

LAN Interface

10BASE-T/100BASE-TX
3 RJ-45 ports

WAN Interface

10BASE-T/100BASE-TX, 1 RJ-45 port

WLAN Interface

Standard: IEEE 802.11b, Direct Sequence Spread Spectrum (DSSS)
Transmission Rate: 11 Mbps, automatic fallback to 5.5, 2 or 1 Mbps
Maximum Channels: US/Canada: 11, Europe (ETSI): 13
Range: Up to 304.8m (1000 ft)
Frequency: (US/Canada/Europe) 2.400-2.4835GHz, Japan 2.471-2.497GHz
Sensitivity: 1, 2, 5.5 Mbps: -80 dBm; 11 Mbps: -76 dBm typical
Modulation: CCK, BPSK, QPSK
Encryption: 64-bit/128-bit WEP
Maximum Clients: 128

Indicator Panel

WAN, WLAN, LAN (Link, Activity), Power

Dimensions

19.5 x 11.25 x 2.55 cm (7.68 x 4.43 x 1.00 in)

Weight

1.34 lbs (0.61 kg)

Input Power

9 V (1 A)

SPECIFICATIONS

Maximum Current

0.04A RMS max.@110V/240V

Power Consumption

5 Watts max. @ 100-240 VAC

Management

Web management

Advanced Features

Dynamic IP Address Configuration – DHCP, DNS

Firewall – Client privileges, hacker prevention and logging

Virtual Private Network – PPTP, IPSec, 1 VPN tunnel

Stateful Packet Inspection

Internet Standards

ARP (RFC 826), IP (RFC 791), ICMP (RFC 792), UDP (RFC 768),
TCP (RFC 793), Telnet (RFC 854-859), MD5 (RFC 1321), BOOTP
Extension (RFC 1497), PPP LCP Extension (RFC 1570), PPPoE
(RFC 2516), NAT (RFC 1631), HTML (RFC 1866), HTTP (RFC
1945), DHCP (RFC 2131), PPTP (RFC 2637)

Temperature

Operating 32 to 104°F (0 to 40°C)

Storage -40 to 158°F (-40 to 70°C)

Humidity

5% to 95% (noncondensing)

Compliances

CE Mark

Emissions

FCC Class B

VCCI Class B

Industry Canada Class B

EN55022 (CISPR 22) Class B

C-Tick - AS/NZS 3548 (1995) Class B

Immunity

EN 61000-3-2/3

EN 61000-4-2/3/4/5/6/8/11

Safety

UL 1950

EN60950 (TÜV)

CSA 22.2 No. 950

Warranty

Limited Lifetime

SPECIFICATIONS

APPENDIX D

ORDERING INFORMATION

Barricade Plus Broadband Firewall Router Products	
SMC7004FW	4-port Firewall Router - WAN/LAN
SMC7004WFW	4-port Wireless Firewall Router - WAN/LAN/WLAN

ORDERING INFORMATION

FOR TECHNICAL SUPPORT, CALL:

From U.S.A. and Canada (24 hours a day, 7 days a week)
(800) SMC-4-YOU; (949) 679-8000; Fax: (949) 679-1481
From Europe (8:00 AM - 5:30 PM UK Time)
44 (0) 118 974 8700; Fax: 44 (0) 118 974 8701

INTERNET

E-mail addresses:

techsupport@smc.com
european.techsupport@smc-europe.com

Driver updates:

<http://www.smc.com/index.cfm?action=techsupportdriversdownloads>

World Wide Web:

<http://www.smc.com/>
<http://www.smc-europe.com/>

FOR LITERATURE OR ADVERTISING RESPONSE, CALL:

U.S.A. and Canada:	(800) SMC-4-YOU;	Fax (949) 679-1481
Spain:	34-93-477-4935;	Fax 34-93-477-3774
UK:	44 (0) 118 974 8700;	Fax 44 (0) 118 974 8701
France:	33 (0) 41 38 32 32;	Fax 33 (0) 41 38 01 58
Italy:	39 02 739 12 33;	Fax 39 02 739 14 17
Benelux:	31 33 455 72 88;	Fax 31 33 455 73 30
Central Europe:	49 (0) 89 92861-0;	Fax 49 (0) 89 92861-230
Switzerland:	41 (0) 1 9409971;	Fax 41 (0) 1 9409972
Nordic:	46 (0) 868 70700;	Fax 46 (0) 887 62 62
Northern Europe:	44 (0) 118 974 8700;	Fax 44 (0) 118 974 8701
Eastern Europe:	34 -93-477-4920;	Fax 34 93 477 3774
Sub Saharian Africa:	27-11 314 1133;	Fax 27-11 314 9133
North Africa:	34 93 477 4920;	Fax 34 93 477 3774
Russia:	7 (095) 290 29 96;	Fax 7 (095) 290 29 96
PRC:	86-10-6235-4958;	Fax 86-10-6235-4962
Taiwan:	886-2-2659-9669;	Fax 886-2-2659-9666
Asia Pacific:	(65) 238 6556;	Fax (65) 238 6466
Korea:	82-2-553-0860;	Fax 82-2-553-7202
Japan:	81-45-224-2332;	Fax 81-45-224-2331
Australia:	61-2-9416-0437;	Fax 61-2-9416-0474
India:	91-22-8204437;	Fax 91-22-8204443

If you are looking for further contact information, please visit www.smc.com or www.smc-europe.com.

SMC[®]

Networks

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Model Number: SMC7004WFW

Revision Number: F1.0 E042002-R01