

# Spectrum24<sup>®</sup>

## Wireless LAN Adapter LA-4111 PC Card Quick Reference Guide

### Introduction

The Spectrum24 LA-4111 PC Card allows PC Card slot-equipped host systems to configure, connect to and establish a Spectrum24 wireless network.

Features include:

- Low-power operation for battery-powered devices with PC Card slots
- Standard NDIS (Network Driver Interface Specification) drivers
- Windows 95, 98, NT 4.0, 2000, and Windows CE driver support
- Card and Socket Services Support
- Plug and Play support
- Power management [Continuously Aware Mode (CAM) and Power Save Polling (PSP)].

### Scope

This Getting Started Guide contains LA-4111 PC Card installation and configuration instructions for Windows 95/98 and NT. If installing the card in a Windows 2000 or CE environment, refer to the Spectrum24 Wireless LAN Adapter Models LA-4111 PC Card & LA-4113 PCI Adapter Product Reference Guide (70-20706-01). For instructions on using the Spectrum24 Plus Pack utilities, refer to the Spectrum24 Plus Pack Users Guide (70-20709-01).

### Installing the PC Card

The physical PC Card installation differs for each system. Refer to the system manufacturer documentation for specific information.

Note: For instructions on installing and configuring the LA-4111 PC Card in a Windows 2000 or CE environment, refer to the Spectrum24 Wireless LAN Adapter Models LA-4111 PC Card and LA-4113 PCI Adapter Product Reference Guide (70-20706-01).

### Preparation

Before beginning the installation, verify the package contains:

- Spectrum24 LA-4111 PC Card
- Installation CD.

Note: Verify the model indicated on the PC Card and packaging before use. Contact the Symbol Support Center if an item is missing or not functioning.

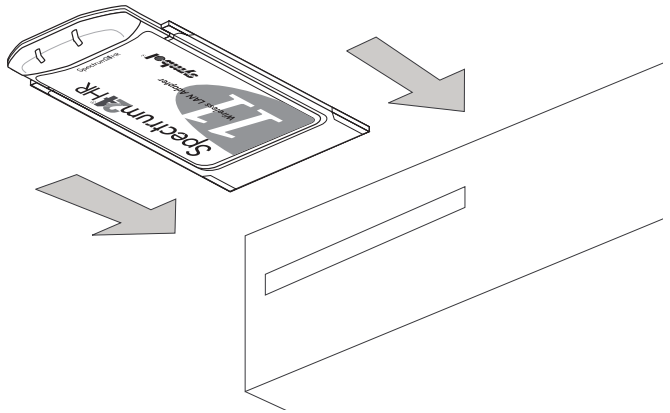
### Installation

The Spectrum24 PC Card installation requires:

- a computer with a Type II PC Card slot
  - a CDROM drive
  - an available interrupt (IRQ)
  - an available I/O port address
  - a Spectrum24 driver installation CD.
- Note: Installation and removal methods vary for different host devices. Refer to system documentation for information.

To install the PC Card:

1. Insert the PC Card in the host system PC slot.



2. Slide in the PC Card until it firmly seats. **Caution!** Align the card properly when inserting. Insert the card firmly without forcing. Forcing the card into the slot can damage the device or the card.

### Additional Information

Obtain additional information by contacting Symbol at:  
1-800-722-6234, inside North America  
+1-516-738-5200, in/outside North America  
<http://www.symbol.com/>

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### Patents

This product is covered by one or more of the following U.S. and foreign Patents:  
U.S. Patent No. 4,360,798; 4,369,361; 4,387,297; 4,460,120; 4,496,831; 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095; 4,758,717; 4,816,660; 4,845,350; 4,896,026; 4,897,532; 4,923,281; 4,933,538; 4,992,717; 5,015,833; 5,017,765; 5,021,641; 5,029,183; 5,047,617; 5,103,461; 5,113,445; 5,130,520; 5,140,144; 5,142,550; 5,149,950; 5,157,687; 5,168,148; 5,168,149; 5,180,904; 5,229,591; 5,230,088; 5,235,167; 5,243,655; 5,247,162; 5,250,791; 5,250,792; 5,262,627; 5,262,628; 5,266,787; 5,278,398; 5,280,162; 5,280,163; 5,280,164; 5,280,498; 5,304,786; 5,304,788; 5,306,900; 5,321,246; 5,324,924; 5,337,361; 5,367,151; 5,373,148; 5,378,882; 5,396,053; 5,396,055; 5,399,846; 5,408,081; 5,410,139; 5,410,140; 5,412,198; 5,418,812; 5,420,411; 5,436,440; 5,444,231; 5,449,891; 5,449,893; 5,468,949; 5,471,042; 5,478,998; 5,479,000; 5,479,002; 5,479,441; 5,504,322; 5,519,577; 5,528,621; 5,532,469; 5,543,610; 5,545,889; 5,552,592; 5,578,810; 5,581,070; 5,589,679; 5,589,680; 5,608,202; 5,612,531; 5,619,028; 5,664,229; 5,668,803; 5,675,139; 5,693,929; 5,698,835; 5,705,800; 5,714,746; 5,723,851; 5,734,152; 5,734,153; 5,745,794; 5,754,587; 5,762,516; 5,763,863; 5,767,500; 5,789,728; 5,808,287; 5,811,785; 5,811,787; 5,815,811; 5,821,519; 5,821,520; 5,823,812; 5,828,050; 5,850,078; 5,861,615; 5,874,720; 5,875,415; 5,900,617; 5,902,989; 5,907,146; 5,912,450; 5,914,478; 5,917,173; 5,920,059; 5,923,025; 5,929,420; 5,945,658; 5,945,659; 5,946,194; 5,956,285; D305,885; D341,584; D344,501; D359,483; D362,453; D363,700; D363,918; D370,478; D383,124; D391,250; D405,077; D406,581; D414,171; D414,172  
Invention No. 55,358; 62,539; 69,060; 69,187 (Taiwan); No. 1,601,796; 1,907,875; 1,955,269 (Japan); European Patent 367,299; 414,281; 367,300; 367,298; UK 2,072,832; France 81/03938; Italy 1,138,713

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# Installing and Configuring the Spectrum24 Driver in Windows 95/98

Before installing the Spectrum24 Windows driver:

- update the system BIOS
- obtain the correct Windows installation media
- verify the Spectrum24 LA-4111 PC Card is installed
- obtain the Spectrum24 Windows driver installation CD

**Note:** Symbol recommends updating the Spectrum24 LA-4111 PC Card to the latest firmware. Use the NICUpdate utility to update the firmware. Refer to the documentation shipped with the Spectrum24 Plus Pack utility suite for instructions on using NICUpdate. To download the latest firmware, go to [www.symbol.com](http://www.symbol.com) and search for firmware and software downloads.

## Installing the Driver in Windows 95

To install the driver for the first time in Windows 95:

**Note:** The Spectrum24 Windows driver ships with the Symbol Network Control Panel Applet (NCPA) utility. Use NCPA to view and configure Spectrum24 LA-4111 PC Card settings.

1. Install the Spectrum24 PC Card as described in the installation section.
2. Power up the system.
3. Insert the Spectrum24 Windows driver installation CD.
4. When Windows 95 recognizes the PC Card, an Update Device Driver Wizard dialog box appears requesting a driver to install. Click Next.
5. Click Finish when Windows displays the following message:  
Windows found the following updated driver for this device: Symbol Spectrum24 PC Card.

Complete the installation instructions displayed by the Windows 95 operating system.

6. Enter the network ESSID in the Symbol Easy Setup window. Click OK.
7. Click Finish.
8. When prompted, reboot the computer.

## Installing the Driver in Windows 98

To install the driver for the first time in Windows 98:

**Note:** The Spectrum24 Windows driver ships with the Symbol Network Control Panel Applet (NCPA) utility. Use NCPA to view and configure Spectrum24 LA-4111 PC Card settings.

1. Install the Spectrum24 PC Card as described in the installation section.
2. Power up the system.

3. Insert the Spectrum24 Windows driver installation CD.
4. When Windows 98 recognizes the PC Card, the Add New Hardware dialog box appears. Click Next.
5. Select Search for best driver for your device. Click Next.
6. Select the location of the installation CDROM. Click Next.
7. Click Next when Windows displays Spectrum24 WLAN PC Card.
8. Enter the network ESSID in the Symbol Easy Setup window. Click OK.
9. Click Finish.
10. When prompted, reboot the computer.

## Configuring the PC Card for Windows 95/98

To configure the PC Card for Windows 95/98 support:

1. From the Windows 95/98 Control Panel, select Network and select Symbol PC Card. Click on the Properties tab.
2. From the Symbol Easy Setup window, click the Advanced button to view the PC Card settings.  
Use the NCPA Mobile Unit, Mobile IP, Encryption and WLAN Adapter tabs to view or adjust the PC Card configuration settings.
3. Exit and save the configuration settings by clicking OK or Finish. Select Cancel to use the default settings.
4. Restart the system for the changes to take effect.

# Installing and Configuring the Spectrum24 Driver in Windows NT

Before installing the Spectrum24 Windows driver:

- update the system BIOS
- enable PCMCIA services
- obtain the correct Windows installation media
- verify the Spectrum24 LA-4111 PC Card is installed
- obtain the Spectrum24 Windows driver installation CD

Symbol recommends updating the Spectrum24 LA-4111 PC Card to the latest firmware. Use the NICUpdate utility to update the firmware. Refer to the documentation shipped with the Spectrum24 Plus Pack utility suite for instructions on using NICUpdate. To download the latest firmware, go to [www.symbol.com](http://www.symbol.com) and search for firmware and software downloads.

## Installing the Driver in Windows NT

To install the driver for the first time in Windows NT:

**Note:** The Spectrum24 Windows driver ships with the Symbol Network Control Panel Applet (NCPA) utility. Use NCPA to view and configure Spectrum24 LA-4111 PC Card settings.

**Note:** For instructions on installing the driver in a system with an existing Spectrum24 WLAN adapter, refer to the Spectrum24 Wireless LAN Adapter Models LA-4111 PC Card and LA-4113 PCI Adapter Product Reference Guide (70-20706-01).

1. Install the PC Card as described in the installation section.
2. Power up the system.
3. Insert the Spectrum24 Windows driver installation CD.
4. From the Windows NT Control Panel, select Network.
5. Select the Adapters tab. Click Add.
6. Click Have Disk.
7. Enter the drive letter assigned to the CD drive. Click OK.
8. When the Select OEM Option dialog box appears, select the Symbol PC Card. Click OK.
9. Enter the network ESSID in the Symbol Easy Setup window. Click OK. The Network dialog box appears.
10. Click Close, and complete the installation instructions displayed by the Windows NT operating system.
11. Reboot the computer when prompted by Windows NT.

## Configuring the PC Card for Windows NT

To configure the PC Card for Windows NT support:

1. From the Windows NT Control Panel, click on the Network icon, select the Adapters tab and select Symbol PC Card. Click on the Properties tab.
2. From the Symbol Easy Setup window, click the Advanced button to view the PC Card settings.  
Use the NCPA Mobile Unit, Mobile IP, Encryption and WLAN Adapter tabs to view or adjust the PC Card configuration settings.
3. If necessary, configure the hardware and radio parameters.
4. Click OK or Close to exit and save the configuration settings.
5. Remove the Spectrum24 driver installation CD and follow the remaining instructions.
6. Reboot the computer when prompted by Windows NT.

## Specifications

The LA-4111 PC Card has the following specifications:

- Dimensions: 3.3 inches x 2.1 inches x 0.2 inches (85 mm x 54 mm x 5 mm)
- Weight: 1.6 oz (45.36 g)
- Operating Temperature: 32 to 130° (0 to 55° C)
- Humidity: 95% maximum non condensing
- Altitude: Storage - 15,000 ft. (4.6 km) Operating - 8,000 ft. (2.4 km)
- Vibration: 2 G peak, sine; 0.02 G peak random (5Hz - 2000Hz)
- Shock: 40 G, 11ms, half sine
- ESD: meets CE-Mark
- PCMCIA Compliance: Type II version x.xx, Card and Socket Services x.xx

## Customer Support

Symbol Technologies provides its customers with world-class customer service and technical support. The Symbol Support Center operates as the single point of contact for any technical problem, question or support issue.

The Support Center operates all year, 24 hours a day, staffed by full-time professional Technical Specialists.

If Symbol cannot solve the problem immediately within its tiered, technical-support center, access to all technical disciplines within Symbol become available for further assistance and support. First response / contact within 24 hours or one business day. Responses by email, fax or telephone.

## North American Contacts

Inside North America, contact Symbol at:  
Symbol Technologies, Inc.  
One Symbol Plaza  
Holtville, New York 11742-1300  
Telephone: 1-516-738-2400 / 1-800-SCAN 234  
Fax: 1-516-738-5990

## Symbol Support Center:

Telephone: 1-800-653-5350  
Fax: (516) 563-5410  
Email: [support@symbol.com](mailto:support@symbol.com)

## International Contacts

Outside North America, contact Symbol at:  
Symbol Technologies Technical Support  
12 Oaklands Park  
Berkshire, RG41 2FD, United Kingdom  
Tel: 011-44-118-945-7000 or 1-516-738-2400 ext. 6213