
Kodak Wi-Fi[®] card



User's guide

www.kodak.com

For interactive tutorials, www.kodak.com/go/howto

For help with your camera, www.kodak.com/go/WiFisupport



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Rochester, New York 14650

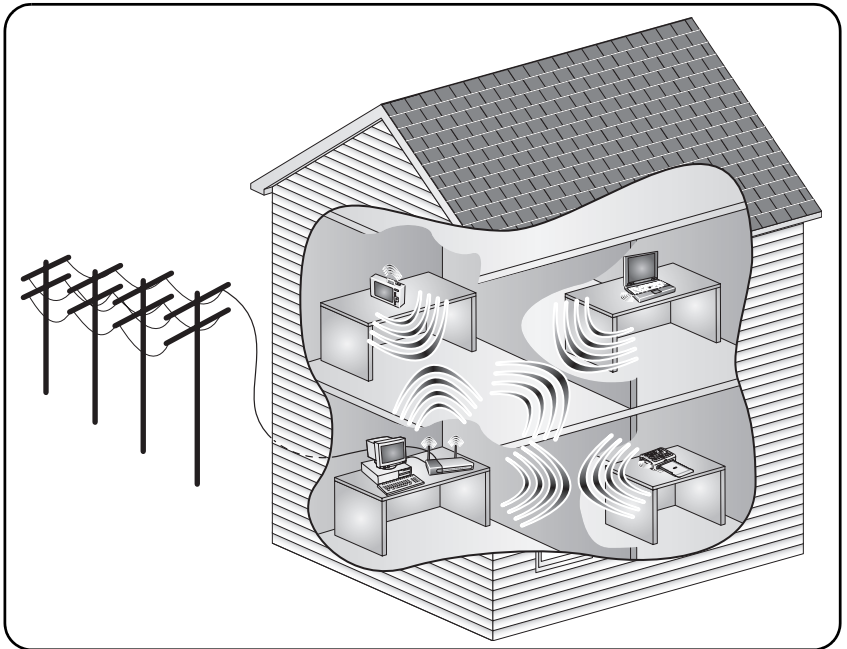
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Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

P/N 4J3036_en

Kodak's Wi-Fi network system

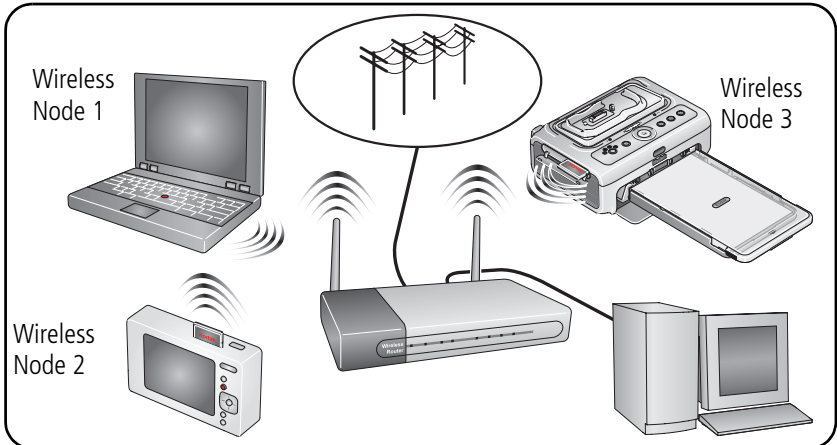


There are two kinds of Wi-Fi networks:

- Wireless mode (also known as infrastructure mode)
- Device to device mode (also known as adhoc mode)

NOTE: In the following drawings, this card is only used for the Nodes 2 and 3.

Wireless (infrastructure) mode



Device to device (adhoc) mode

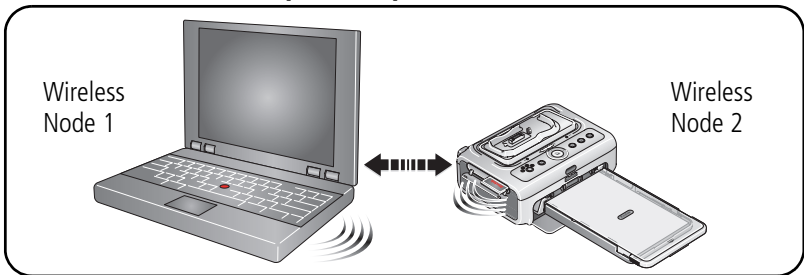


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1

Installing EasyShare software

You can use your wireless EasyShare camera or printer dock with or without EasyShare software. However, to use some features, you need to install EasyShare software.

IMPORTANT: *Install and use EasyShare software version 5.0 or higher; earlier versions will not allow Wi-Fi capability.*

- 1 Close all software applications that are open on your computer (including anti-virus software).
- 2 Place the Kodak EasyShare software CD into the CD-ROM drive.
- 3 Load the software:

Windows OS—if the install window does not appear, choose Run from the Start menu and type d:\setup.exe where d is the drive letter that contains the CD.

Mac OS X—double-click the CD icon on the desktop, then click the Install icon.

- 4 Follow the on-screen instructions to install the software.

Windows OS—select Complete to automatically install the most commonly used applications. Select Custom to choose the applications you wish to install.

Mac OS X—follow the on-screen instructions.

NOTE: When prompted, register your camera and software. Registering lets you sign up for information that keeps your system up-to-date. To register later, see www.kodak.com/go/register.

For information on the software applications included on the Kodak EasyShare software CD, click the Help button in EasyShare software.

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Getting help

Helpful links

Camera

Get support for your product (FAQs, troubleshooting information, arrange for repairs, etc.)	www.kodak.com/go/WiFisupport
Purchase camera accessories (camera docks, printer docks, lenses, cards, etc.)	www.kodak.com/go/WiFiaccessories
Download the latest camera firmware and software	http://www.kodak.com/global/en/service/downloads/index
See online demonstrations of your camera	www.kodak.com/go/howto

Software

Get information on EasyShare software	www.kodak.com/go/easysharesw (or click the Help button in the EasyShare software)
Get help with the Windows operating system and working with digital pictures	www.kodak.com/go/pcbasics

Other

Get support for other cameras, software, accessories, more	www.kodak.com/go/support
Get information on EasyShare printer docks	www.kodak.com/go/printerdocks
Download the latest firmware for your EasyShare printer dock	http://www.kodak.com/global/en/service/downloads/index

Telephone customer support

Before you call, have the following information available:

- Computer model
- Operating system, RAM
- Processor type and speed (MHz)
- Amount of free hard disk space
- Version of Kodak EasyShare software
- Exact error message you received

Australia	1800 147 701
Austria	0179 567 357
Belgium	02 713 14 45
Brazil	0800 150000
Canada	1 800 465 6325
China	800 820 6027
Denmark	3 848 71 30
Ireland	01 407 3054
Finland	0800 1 17056
France	01 55 1740 77
Germany	069 5007 0035
Greece	00800 441 25605
Hong Kong	800 901 514
India	91 22 617 5823
Italy	02 696 33452
Japan	03 5540 9002
Korea	00798 631 0024

Netherlands	020 346 9372
New Zealand	0800 440 786
Norway	23 16 21 33
Philippines	1 800 1 888 9600
Portugal	021 415 4125
Singapore	800 6363 036
Spain	91 749 76 53
Sweden	08 587 704 21
Switzerland	01 838 53 51
Taiwan	0800 096 868
Thailand	001 800 631 0017
United Kingdom	0870 243 0270
United States	1 800 235 6325 585 726 7260 (toll)
International Toll Line	+44 131 458 6714
International Toll Fax	+44 131 458 6962

For the most up-to-date listings, visit www.kodak.com/go/dfiswwcontacts.

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Appendix

Wi-Fi card specifications

Compliance—802.11, 802.11b

Security—64/128-bit WEP, WPA (WPA is supported by the card, but may not be supported by the camera or printer dock)

Card type—SD Input/Output Card (SDIO; specification Ver 1.00 compliant)

Modulation Technique—Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)

Frequency Range—2412 – 2462 MHz (1 – 11 channel, ISM band)

Transmission Rate—1 Mbps, 2 Mbps (802.11) / 5.5 Mbps, 11 Mbps (802.11b)

Operation—3.3 V via device

Antenna—Integrated

Dimensions—24 x 40 x 2.1 mm

Compatibility—

- Wireless-enabled Kodak EasyShare devices
- Kodak EasyShare software version 5 or higher

Wireless channels

This Wi-Fi card operates on the legal channel for your region. You are able to manually select only channels 1-11. Wi-Fi networks operate in the ISM (Industrial, Scientific, and Medical) radio frequency band. The ISM band is divided into channels, each occupying 5MHZ of frequency band. To join a wireless network, a node must set its channel to that of the access point (or - in a device to device network - to that of the first node).

Nearby networks that operate on the same channel will interfere with one another, resulting in lower network speed or connection loss.



CAUTION:

For country-specific compliance, see the user's guide for your camera, printer, or other device.

Important safety instructions

Using this product

- Read and follow these instructions before using Kodak products. Always follow basic safety procedures.
- If using this product in an airplane, observe all instructions of the airline.



CAUTION:

Do not disassemble this product; there are no user-serviceable parts inside. Refer servicing to qualified service personnel. Do not expose this product to liquid, moisture, or extreme temperatures. Kodak AC adapters and battery chargers are intended for indoor use only. The use of controls, adjustments, or procedures other than those specified herein may result in exposure to shock and/or electrical or mechanical hazards.

Upgrading your firmware

Download the latest versions of the camera firmware (the software that runs the camera) from www.kodak.com/go/WiFiDownloads.

Warranty

Limited Warranty

Kodak warrants Kodak EasyShare digital cameras and accessories (excluding batteries) to be free from malfunctions and defects in both materials and workmanship for one year from the date of purchase.

Retain the original dated sales receipt. Proof of the date of purchase will be required with any request for warranty repair.

Limited warranty coverage

This limited warranty will be honored only within the geographical location that Kodak EasyShare digital cameras and accessories were purchased.

Kodak will REPAIR or REPLACE Kodak EasyShare digital cameras and accessories if they fail to function properly during the warranty period, subject to any conditions and/or limitations stated herein. Such repair service will include all labor as well as any necessary adjustments and/or replacement parts. Such repair or replacement is the sole remedy under this warranty.

If replacement parts are used in making repairs, these parts may be remanufactured, or may contain remanufactured materials. If it is necessary to replace the entire product, it may be replaced with a remanufactured product.

Limitations

Request for Warranty service will not be accepted without proof of date of purchase, such as a copy of the original dated sales receipt. (Keep the original for your records.)

This warranty does not apply to the battery(s) used in digital cameras or accessories. This warranty does not cover circumstances beyond Kodak's control, nor problems

caused by failure to follow the operating instructions in the Kodak EasyShare digital cameras and accessories user's guides.

This warranty does not apply when failure is due to shipping damage, accident, alteration, modification, unauthorized service, misuse, abuse, use with incompatible accessories or attachments, failure to follow Kodak's operation, maintenance or repacking instructions, failure to use items supplied by Kodak (such as adapters and cables), or claims made after the duration of this warranty.

Kodak makes no other express or implied warranty for this product. In the event that the exclusion of any implied warranty is ineffective under the law, the duration of the implied warranty will be one year from the purchase date.

The option of replacement is Kodak's only obligation. Kodak will not be responsible for any special, consequential or incidental damages resulting from the sale, purchase, or use of this product, regardless of the cause. Liability for any special, consequential or incidental damages (including but not limited to loss of revenue or profit, downtime costs, loss of the use of the equipment, cost of substitute equipment, facilities or services, or claims of your customers for such damages resulting from the purchase, use or failure of the product), regardless of cause or for breach of any written or implied warranty is expressly disclaimed and excluded herefrom.

Your rights

Some states or jurisdictions do not allow exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states or jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific rights, and you may have other rights which vary from state to state or by jurisdiction.

Outside the United States and Canada

In countries other than the United States and Canada, the terms and conditions of this warranty may be different. Unless specific Kodak warranty is communicated to the purchaser in writing by a Kodak company, no warranty or liability exists beyond any minimum requirements imposed by law, even though defect, damage, or loss may be by negligence or other act.

Regulatory compliance

FCC compliance and advisory



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 or 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 or more of the following measures: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for additional suggestions.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the

product, they must be used in order to ensure compliance with FCC regulation.



CAUTION:

When using the Wi-Fi card with a printer dock: This equipment should be installed and operated with a minimum distance of 7.9 inches (20 cm) for 2.4 GHz operations between the radiator and your body. This transmitter must not be collocated or operate in conjunction with any other antenna or transmitter.

SAR statement (when using the Wi-Fi card with a camera)

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. Kodak Wi-Fi card (3F8508) has been tested and found to comply with FCC radiation exposure limits set forth for an uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. The maximum SAR levels tested for Kodak Wi-Fi card (3F8508) has been show to be 0.616 W/kg at Body.

FCC and Industry Canada

This device complies with Industry Canada RSS-210 and 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.

Canadian DOC statement

DOC Class B Compliance—This Class B digital apparatus complies with Canadian ICES-003.

Observation des normes-Class B—Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Class B ITE

이 기기는 가정용으로 전자파적합등록을 한 기기로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

CE

Hereby, Eastman Kodak Company declares that this Kodak Wi-Fi card is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Waste Electrical and Electronic Equipment labeling



In the European Union, do not discard this product as unsorted municipal waste. Contact your local authorities or go to www.kodak.com/go/recycle for recycling program information.

Glossary

Access point—A wireless LAN transceiver or “base station” that can connect a wired LAN to one or many wireless devices. Access points can also bridge to each other.

Adhoc mode—A client setting that provides independent peer-to-peer connectivity in a wireless LAN. An alternative set-up is one where PCs communicate with each other through an AP. See access point and Infrastructure mode.

Bridge—A product that connects a local area network (LAN) to another local area network that uses the same protocol (for example, wireless, Ethernet or token ring). Wireless bridges are commonly used to link buildings in campuses.

Client—Any computer connected to a network that requests services (files, print capability) from another member of the network.

DHCP—A utility that enables a server to dynamically assign IP addresses from a predefined list and limit their time of use so that they can be reassigned. Without DHCP, an IT Manager would have to manually enter in all the IP addresses of all the computers on the network. When DHCP is used, whenever a computer logs onto the network, it automatically gets an IP address assigned to it.

DNS—A program that translates URLs to IP addresses by accessing a database maintained on a collection of Internet servers. The program works behind the scenes to facilitate surfing the Web with alpha versus numeric addresses. A DNS server converts a name like mywebsite.com to a series of numbers like 107.22.55.26. Every website has its own specific IP address on the Internet.

DSL—Various technology protocols for high-speed data, voice and video transmission over ordinary twisted-pair copper POTS (Plain Old Telephone Service) telephone wires.

Encryption key—An alphanumeric (letters and/or numbers) series that enables data to be encrypted and then decrypted so it can be safely shared among members of a network. WEP uses an encryption key that automatically encrypts outgoing wireless data. On the receiving side, the same encryption key enables the computer to automatically decrypt the information so it can be read.

ESSID—The identifying name of an 802.11 wireless network. When you specify your correct ESSID in your client setup you ensure that you connect to your wireless network rather than another network in range. (See SSID.) The ESSID can be called by different terms, such as Network Name, Preferred Network, SSID or Wireless LAN Service Area.

Infrastructure mode—A client setting providing connectivity to an AP. As compared to Ad-Hoc mode, whereby PCs communicate directly with each other, clients set in Infrastructure Mode all pass data through a central AP. The AP not only mediates wireless network traffic in the immediate neighborhood, but also provides communication with the wired network. See Ad-Hoc and AP.

IP (Internet Protocol) telephony—Technology that supports voice, data and video transmission via IP-based LANs, WANs, and the Internet. This includes VoIP (Voice over IP).

IP address—A 32-bit number that identifies each sender or receiver of information that is sent across the Internet. An IP address has two parts: an identifier of a particular network on the Internet and an identifier of the particular device (which can be a server or a workstation) within that network.

Network name—Identifies the wireless network for all the shared components. During the installation process for most wireless networks, you need to enter the network name or SSID. Different network names are used when setting up your individual computer, wired network or workgroup.

Router—A device that forwards data packets from one local area network (LAN) or wide area network (WAN) to another. Based on routing tables and routing protocols, routers can read the network address in each transmitted frame and make a decision on how to send it via the most efficient route based on traffic load, line costs, speed, bad connections, etc.

SSID—A 32-character unique identifier attached to the header of packets sent over a WLAN that acts as a password when a mobile device tries to connect to the BSS. (Also called ESSID.) The SSID differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. A device will not be permitted to join the BSS unless it can provide the unique SSID. Because an SSID can be sniffed in plain text from a packet, it does not supply any security to the network. An SSID is also referred to as a Network Name because essentially it is a name that identifies a wireless network.

SSL—Commonly used encryption scheme used by many online retail and banking sites to protect the financial integrity of transactions. When an SSL session begins, the server sends its public key to the browser. The browser then sends a randomly generated secret key back to the server in order to have a secret key exchange for that session

TCP—A protocol used along with the Internet Protocol (IP) to send data in the form of individual units (called packets) between computers over the Internet. While IP

takes care of handling the actual delivery of the data, TCP takes care of keeping track of the packets that a message is divided into for efficient routing through the Internet. For example, when a web page is downloaded from a web server, the TCP program layer in that server divides the file into packets, numbers the packets, and then forwards them individually to the IP program layer. Although each packet has the same destination IP address, it may get routed differently through the network. At the other end, TCP reassembles the individual packets and waits until they have all arrived to forward them as a single file.

TCP/IP—The underlying technology behind the Internet and communications between computers in a network. The first part, TCP, is the transport part, which matches the size of the messages on either end and guarantees that the correct message has been received. The IP part is the user's computer address on a network. Every computer in a TCP/IP network has its own IP address that is either dynamically assigned at startup or permanently assigned. All TCP/IP messages contain the address of the destination network as well as the address of the destination station. This enables TCP/IP messages to be transmitted to multiple networks (subnets) within an organization or worldwide.

WEP—Basic wireless security provided by Wi-Fi. In some instances, WEP may be all a home or small-business user needs to protect wireless data. WEP is available in 40-bit (also called 64-bit), or in 108-bit (also called 128-bit) encryption modes. As 108-bit encryption provides a longer algorithm that takes longer to decode, it can provide better security than basic 40-bit (64-bit) encryption.

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