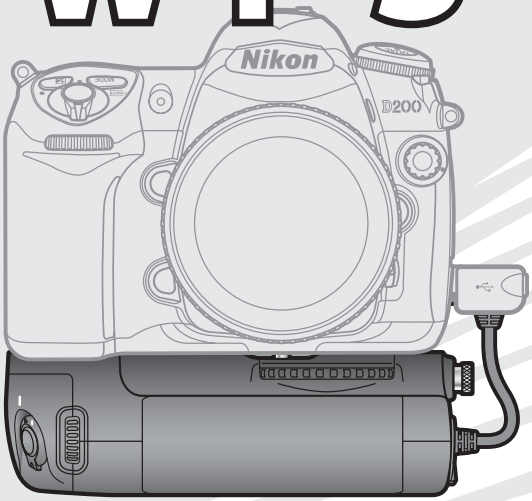
En

Wireless Transmitter

WT-3



User's Manual

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This product includes Apple mDNS source code that is subject to the terms of the Apple Public Source License located at URL *http://developer.apple.com/darwin/*.

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For Your Safety

To prevent damage to your Nikon product or injury to yourself or to others, read the following safety precautions in their entirety before using this equipment. Keep these safety instructions where all those who use the product will read them.

The consequences that could result from failure to observe the precautions listed in this section are indicated by the following symbol:

This icon marks warnings, information that should be read before using this Nikon product to prevent possible injury.

WARNINGS

⚠ Do not disassemble

Failure to observe this precaution could result in fire, electric shock, or other injury. Should the product break open as the result of a fall or other accident, disconnect the camera power source and take the product to a Nikon-authorized service representative for inspection.

⚠ Cut power immediately in the event of malfunction

Should you notice smoke or an unusual smell coming from the equipment, immediately unplug the AC adapter and remove the battery, taking care to avoid burns. Continued operation could result in injury. After removing the battery, take the equipment to a Nikon-authorized service representative for inspection.

⚠ Do not use in the presence of flammable gas

Failure to observe this precaution could result in explosion or fire.

⚠ Keep dry

Do not immerse in or expose to water or rain. Failure to observe this precaution could result in fire or electric shock.

⚠ Do not handle with wet hands

Failure to observe this precaution could result in electric shock.

⚠ Keep out of reach of children

Failure to observe this precaution could result in injury.

⚠ Observe proper precautions when handling batteries

Batteries may leak or explode if improperly handled. Observe the following precautions when handling batteries for use in this product:

- Be sure the product is off before replacing the battery. If you are using an AC adapter, be sure it is unplugged.
- Use only batteries approved for use in this equipment.
- Do not attempt to insert the battery upside down or backwards.
- Do not short or disassemble the battery.
- Do not expose the battery to flame or to excessive heat.
- Do not immerse in or expose to water.
- Replace the terminal cover when transporting the battery. Do not transport or store with metal objects such as necklaces or hairpins.
- Batteries are prone to leakage when fully discharged. To avoid damage to the product, be sure to remove the battery when no charge remains.
- When the battery is not in use, attach the terminal cover and store in a cool place.
- Immediately after use, or when the product is used on battery power for an extended period, the battery may become hot. Before removing the battery, turn the camera off and allow the battery to cool.
- Discontinue use immediately should you notice any changes in the battery, such as discoloration or deformation.

⚠ Do not expose to high temperatures

Do not leave the device in a closed vehicle under the sun or in other areas subject to extremely high temperatures. Failure to observe this precaution could result in fire or in damage to the casing or internal parts.

⚠ Observe caution when using the WA-E1

When using the WA-E1 extended range antenna (available separately), be careful not to put the tip of the antenna in your eye accidentally. Failure to observe this precaution could result in blindness or other visual impairment.

⚠ CD-ROMs

The CD-ROMs on which the software and manuals are distributed should not be played back on audio CD equipment. Playing CD-ROMs on an audio CD player could cause hearing loss or damage the equipment.

⚠ Follow the instructions of hospital and airline personnel

This device emits radio frequency radiation that could interfere with medical or navigational equipment. Do not use this device in a hospital or on board an airplane without first obtaining the permission of hospital or airline staff.

Notices

- No part of the manuals included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without Nikon's prior written permission.
- Nikon reserves the right to change the specifications of the hardware and software described in these manuals at any time and without prior notice.
- Nikon will not be held liable for any damages resulting from the use of this product.
- While every effort has been made to ensure that the information in these manuals is accurate and complete, we would appreciate it were you to bring any errors or omissions to the attention of the Nikon representative in your area (address provided separately).

This product, which contains encryption software developed in the United States, is controlled by the United States Export Administration Regulations and may not be exported or re-exported to any country to which the United States embargoes goods. As of April 2006 the following countries were subject to embargo: Cuba, Iran, North Korea, Libya, Sudan, and Syria.

Notice for Customers in the U.S.A.

U.S.A. Federal Communications Commission (FCC) Declaration of Conformity

This device complies with Part 15 of the FCC rules. Operation of the device 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.

Products that contain a radio transmitter are labeled with FCC ID and may also carry the FCC logo.

FC **Nikon**
WT-3A

FCC Radio Frequency 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 or more 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/television technician for help.

CAUTIONS

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Nikon Corporation may void the user's authority to operate the equipment.

Interface Cables

Use the interface cables sold or provided by Nikon for your equipment. Using other interface cables may exceed the limits of Class B Part 15 of the FCC rules.

FCC Radiation Exposure Statement

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. This Wireless Transmitter (WT-3A) has been tested and found to comply with the Federal Communications Commission (FCC) guidelines on radio frequency energy (RF) exposures. The maximum SAR levels tested for the Wireless Transmitter (WT-3A) have been shown to be 0.2 W/kg at head.

This device should not be co-located or operated with any other antenna or transmitter.

Notice for Customers in the State of California, U.S.A.

WARNING: Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

Nikon Inc.,
1300 Walt Whitman Road, Melville, New York 11747-3064, U.S.A.
Tel.: 631-547-4200

Notices for Customers in Canada

CAUTION: This class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

ATTENTION: Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

RSS-GEN Exposure of Humans to RF Fields

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website at *http://www.hc-sc.gc.ca/rpb*.

Notice for Customers in Europe

Hereby, Nikon, declares that this digital camera is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Notice for Customers in France

Outdoor use of wireless transceivers is prohibited in France.

Symbol for Separate Collection in European Countries

This symbol indicates that this product is to be collected separately.

The following apply only to users in European countries:

- This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

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Introduction

Thank you for purchasing a WT-3 or WT-3A wireless transmitter for compatible Nikon digital cameras. The WT-3 is for use in the country of sale, the countries of the European Union (EU) and European Free Trade Association (EFTA), Thailand, Japan, and Hong Kong. The WT-3A is for use in the country of sale, Canada, and the United States of America. The principal difference between the WT-3 and WT-3A is in the number of channels supported (14, 36); unless otherwise stated, all references to the WT-3 also apply to the WT-3A.

This manual describes how to connect the WT-3, how to control the camera from a computer, and how to transmit images to a computer or printer. Before using the WT-3, be sure to read the notices and warnings on pages i–iv.

The following symbols and conventions are used throughout this manual:

This icon marks cautions, information that should be read before use to prevent damage to the product.	This icon marks notes, information that should be read before using the device.
This icon marks tips, additional information that may be helpful when using the product.	This icon indicates that more information is available elsewhere in this manual.

Background Knowledge

This manual assumes basic knowledge of ftp servers and local area networks (LAN). For more information on installing, configuring, and using devices in a network, contact the manufacturer or network administrator.

Life-Long Learning

As part of Nikon's "Life-Long Learning" commitment to ongoing product support and education, continually-updated information is available on-line at the following sites:

- **For users in the U.S.A.**: *http://www.nikonusa.com/*
- **For users in Europe and Africa**: *http://www.europe-nikon.com/support*
- **For users in Asia, Oceania, and the Middle East**: *http://www.nikon-asia.com/*

Visit these sites to keep up-to-date with the latest product information, tips, answers to frequently-asked questions (FAQs), and general advice on digital imaging and photography. Additional information may be available from the Nikon representative in your area. See the URL below for contact information:

http://nikonimaging.com/

Supported Modes

The WT-3 connects the camera to wireless and Ethernet networks. The camera can then be controlled remotely from a computer or photographs transmitted from the camera to an ftp server or printer. The WT-3 supports the following modes:

Mode	Host	Description	Network type	
Transfer mode	Computer or ftp server	Upload new or existing photographs to host.	Wireless and Ethernet	21
PC mode	Computer	Control camera from computer.		26
Print mode	Computer	Print JPEG photographs on printer connected to network computer.		30
	PD-10 wireless printer adapter	Print JPEG photographs on PictBridge printer connected to optional PD-10 wireless printer adapter.	Wireless only	32

The WT-3 Setup Utility CD

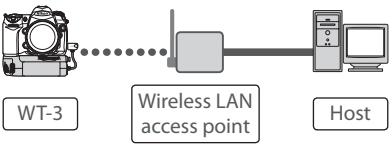
The supplied WT-3 Setup Utility CD contains the following:

- **WT-3 Setup Utility** (7, 11): Use this software to copy host profiles to the camera.
- **D200 A and B firmware version 2.00** (6): Update to this version of the camera firmware before using the WT-3.
- **D200 firmware update manual** (6): Read this manual for instructions on updating the camera firmware.

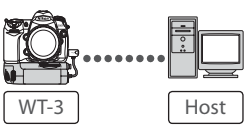
Wireless Networks: Infrastructure Versus Ad-hoc

Wireless networks may be either *infrastructure* or *ad-hoc*.

- **Infrastructure**: Connection is via a wireless LAN access point.



- **Ad-hoc**: A peer-to-peer wireless network consisting solely of the WT-3 and the host.



System Requirements

Before using the WT-3 or WT-3 Setup Utility CD, confirm that your system meets the following requirements:

Camera	• **Model**: Nikon D200 digital single-lens reflex camera • **Firmware**: A and B version 2.00 (provided on supplied WT-3 Setup Utility CD)
Power source	One EN-EL3e rechargeable Li-ion battery (supplied with D200) or EH-6 AC adapter (available separately)
OS[1]	• **To connect to a computer**: Windows XP Service Pack 1 or later (Service Pack 2 recommended) or Mac OS X version 10.3 or later required (Power PC G4/G5 CPUs only). Connection to computers on other networks via router not supported. • **To upload pictures to an ftp server**: Operation has been confirmed with Windows XP Professional and Mac OS X version 10.3 or later. Under these operating systems, ftp servers can be configured using standard ftp services such as IIS (Internet Information Services). Internet ftp connections and ftp servers running third-party software are not supported.
Network	• **Wireless**: Wireless LAN access point or computer with built-in or external wireless LAN adapter (IEEE 802.11b or 802.11g compliant).[2] • **Ethernet**: Ethernet cable and computer with built-in or external Ethernet port (100 base-TX or 10 base-T)
Miscellaneous	• **WT-3 Setup Utility**: required to copy computer profiles to camera (camera can be configured for use with ftp servers using either WT-3 Setup Utility or camera menus). WT-3 Setup Utility can not be used to configure camera for use with optional PD-10 wireless printer adapter. • **CD-ROM drive**: required when installing WT-3 Setup Utility • **USB**: UC-E4 USB cable (included with camera) and computer with built-in USB port required when copying network profiles to camera.[3]

1. For the latest information on supported operating systems, see the Nikon website for your area (✎ 1).
2. For information on wireless network settings for Windows XP Professional and Mac OS X, see the online help for the WT-3 Setup Utility.
3. Connect the camera directly to the computer. The camera may not function as expected when connected via a hub, extension cable, or keyboard.

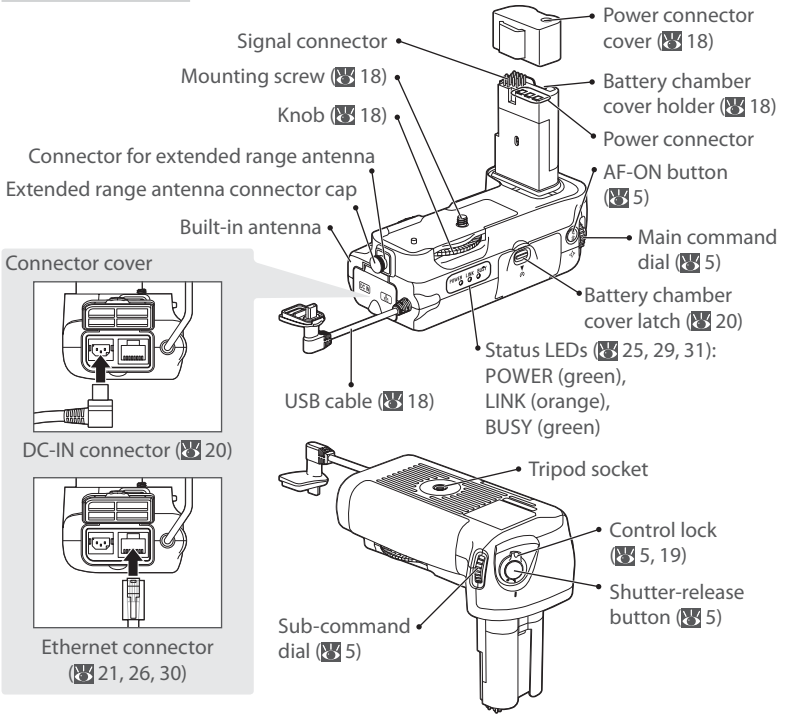
The PD-10 Wireless Printer Adapter

A PictBridge-compatible printer with a flat (type A) USB connector is required for connection to the PD-10. A computer is not required.

Multiple Transmitters

Simultaneous use of multiple WT-3 wireless transmitters with a single host may produce unexpected results. Do not attempt to use more than one WT-3 per host.

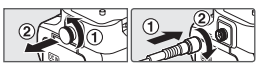
Parts of the WT-3



The WA-E1 Extended Range Antenna (Available Separately)

The optional WA-E1 extended range antenna with tripod mount can be used to extend the range of wireless transmitters.

When using the WA-E1, remove the antenna connector cap (①) and connect the antenna as shown at right (②).

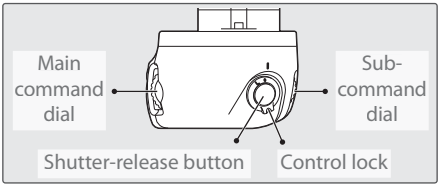


Restrictions on Wireless Devices

Wireless regulations vary from country to country. Wireless devices are available for purchase only in countries in which they have been certified for use.

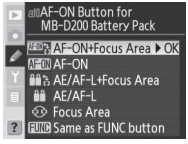
The WT-3 Controls

The WT-3 is equipped with a shutter-release button, **AF-ON** button, and command dials for ease of use when taking photographs in tall (portrait) orientation. The shutter-release button and command dials perform the same functions as the matching controls on the camera body; for more information, see the camera manual. If desired, the controls on the WT-3 can be disabled by rotating the control lock to the **L** position. Please note that the control lock can not be used to turn the camera on or off.



The command dials on the WT-3 are affected by the option selected for Custom Setting f5 (**Command dials**). See the camera manual for details.

The function performed by the WT-3 **AF-ON** button is determined by the option selected for Custom Setting a10 (**AF-ON for MB-D200**).



Option	Description
AF-ON+ Focus Area (default)	**AF-ON** button on WT-3 performs same function as camera **AF-ON** button. Focus area can be selected by pressing **AF-ON** button on WT-3 and rotating sub-command dial.
AF-ON	**AF-ON** button on WT-3 performs same function as camera **AF-ON** button.
AE/AF-L+ Focus Area	**AF-ON** button on WT-3 performs same function as camera **AE-L/AF-L** button. Focus area can be selected by pressing **AF-ON** button on WT-3 and rotating sub-command dial.
AE/AF-L	**AF-ON** button on WT-3 performs same function as camera **AE-L/AF-L** button.
Focus Area	Focus area can be selected by pressing **AF-ON** button on WT-3 and rotating sub-command dial.
Same as FUNC button	**AF-ON** button on WT-3 performs function currently assigned to camera FUNC. button using Custom Setting f4 (**FUNC. Button**).

Setup

Follow the steps below to prepare the WT-3 for use:

Update the camera firmware : The WT-3 is supported from camera firmware A version 2.00 and B version 2.00. Users of earlier versions will need to update the camera firmware as described in the firmware update manual on the supplied WT-3 Setup Utility CD.

Copy network profiles to the camera: Users of Windows XP Service Pack 1 or later or Mac OS X version 10.3 or later can copy computer or printer profiles to the camera using the supplied WT-3 Setup Utility. Skip this step when using the camera rather than a computer to adjust settings for connection to an ftp server in transfer mode (48).

Install the WT-3 Setup Utility (7)

Copy network profiles to the camera (11)

Connect the WT-3 (18)

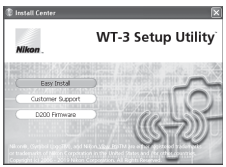
Insert the battery (20)

After setting up the WT-3 as described on the following pages, proceed to "Uploading Images: Transfer Mode" (21), "Controlling the Camera: PC Mode" (26), or "Printing Pictures: Print Mode" (30).

Updating the Camera Firmware

The WT-3 is supported from camera firmware A version 2.00 and B version 2.00. Display the camera firmware version as described in the camera manual. If earlier versions are installed, update the camera firmware as described in the firmware update manual on the supplied WT-3 Setup Utility CD.

To display the firmware update manual, start the Install Center as described in Steps 1–3 of "Install the WT-3 Setup Utility" on page 7 (Windows) or 9 (Macintosh) and click **D200 Firmware** to display the "D200 Firmware" folder. Double-clicking **INDEX.pdf** displays a list of languages; click a language to display the update manual (Adobe Reader or Adobe Acrobat Reader 4.0 or later required).



D200 Firmware

Additional Updates

Once the camera firmware has been updated for use with the WT-3 as described above, all subsequent updates should be performed with the WT-3 connected (18) and **Off** selected for **Wireless transmitter** > **Wireless LAN system** (34).

Installing the WT-3 Setup Utility

The WT-3 Setup Utility is used to copy computer and printer profiles to the camera. The WT-3 Setup Utility is required when configuring the camera for connection to a computer in transfer, PC, and print modes. Either the WT-3 Setup Utility or the camera menus (48) can be used for connection to ftp servers in transfer mode.

Follow the steps below to install the WT-3 under Windows XP or Mac OS X.

Supported Operating Systems

The WT-3 Setup Utility is compatible with Mac OS X version 10.3 or later (Power PC G4/G5 CPUs only) or a pre-installed version of Windows XP Service Pack 1 or later (Service Pack 2 recommended).

Windows XP Service Pack 1 or Later

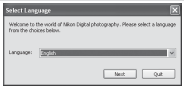
1 Start the computer and log in to an account with administrator privileges.

2 Insert the supplied installer CD in a CD-ROM drive. The "Select Region" dialog will be displayed; select a region and click **Next**.

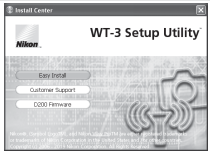
If the "Select Region" Dialog Is Not Displayed

If the "Select Region" dialog is not displayed, select **My Computer** from the **Start** menu and double-click the icon for the CD-ROM drive containing the installer CD.

3 Select a language and click **Next**.



4 Click **Easy Install**.



Other Install Center Options

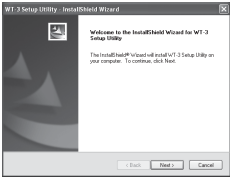
- **Customer Support**: View the ReadMe file or visit Nikon support websites.*
- **D200 Firmware**: Update the camera firmware (6).

*Internet connection required.

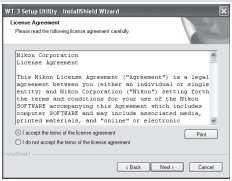
The WT-3 Setup Utility

The WT-3 Setup Utility supplies the computer with information about the camera and controls image transfer. It must be installed on each of the host computers used by the WT-3. The WT-3 Setup Utility is not required for upload to an ftp server in transfer mode.

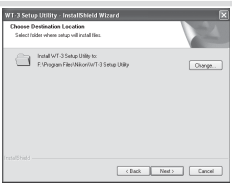
5 Click **Next**.



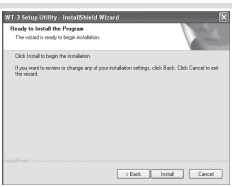
6 A license agreement will be displayed. After reading the agreement, select **I accept the terms in the license agreement** and click **Next** to accept and proceed with installation.



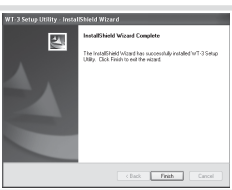
7 The default install location is displayed. Click **Next** to install the software to this folder. To choose another folder, click **Change...** and navigate to the desired location.



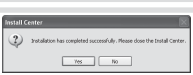
8 Clicking **Next** in Step 7 displays the dialog shown at right. Click **Install**.



9 Click **Finish**.



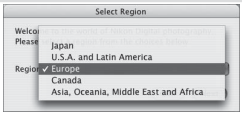
10 Click **Yes** and remove the WT-3 Setup Utility CD from the CD-ROM drive. If prompted to restart the computer, follow the on-screen instructions.



Mac OS X Version 10.3 or Later

1 Start the computer and log in to an account with administrator privileges.

2 Insert the supplied installer CD in a CD-ROM drive. Double-click the installer CD icon on the desktop, and then double-click the **Welcome** icon. The "Select Region" dialog will be displayed; select a region and click **Next**.



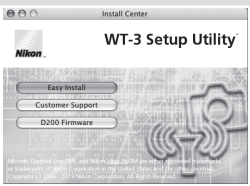
3 Select a language and click **Next**.

4 Click **Easy Install**.

Other Install Center Options

- **Customer Support**: View the ReadMe file or visit Nikon support websites.*
- **D200 Firmware**: Update the camera firmware (6).

* Internet connection required.

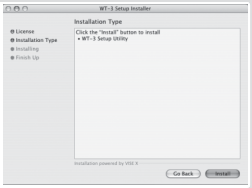


5 Enter the administrator name and password and click **OK**.

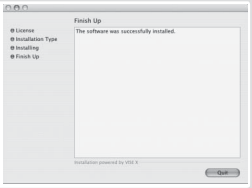
6 Read the license agreement and click **Continue**.

Click **Agree** to accept the terms of the license agreement and proceed with installation.

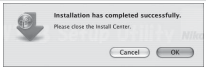
7 Click **Install**.



8 Click **Quit**.



9 Click **OK** and remove the WT-3 Setup Utility CD from the CD-ROM drive. If prompted to restart the computer, follow the on-screen instructions.



Installing PictureProject

Install PictureProject before installing the WT-3 Setup Utility. The WT-3 Setup Utility must be reinstalled if PictureProject is installed after the WT-3 Setup Utility.

Copying Network Profiles to the Camera

Profiles for network computers, ftp servers, and printers can be copied to the camera using the WT-3 Setup Utility. The WT-3 Setup Utility is required for connection to a computer in transfer, PC, and print modes. Either the WT-3 Setup Utility or the camera menus (48) can be used for connection to ftp servers in transfer mode.

Supported Operating Systems

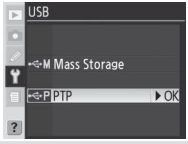
The WT-3 Setup Utility is compatible with Mac OS X version 10.3 or later (Power PC G4/G5 CPUs only) or a pre-installed version of Windows XP Service Pack 1 or later (Service Pack 2 recommended).

Before starting the WT-3 Setup Utility, ensure that the camera battery is fully charged or the optional EH-6 AC adapter is connected.

1 Set the camera **USB** option to **PTP**.

1.1 Turn the camera on.

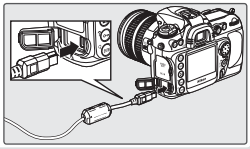
1.2 Select the **USB** in the camera setup menu and choose **PTP**.



2 Connect the UC-E4 USB cable supplied with the camera.

2.1 Turn the camera off.

2.2 Connect the UC-E4 as shown at right.



Connecting the USB Cable

The USB cable can also be connected when the WT-3 is attached. Disconnect the WT-3 USB cable and connect the UC-E4 to the camera as described above.

3 Turn the camera on.

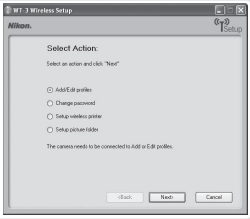
4 Turn the computer on and start the WT-3 Setup Utility.

- **Windows**: Double-click the **WT-3 Setup Utility** icon on the desktop
- **Macintosh**: Click the **WT-3 Setup Utility** icon in the Dock.

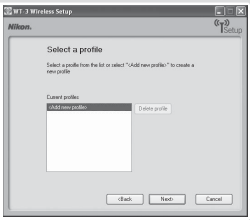
The dialog shown at right will be displayed; click **Next**.

5 Select **Add/edit profile** and click **Next** to load camera network profiles into the computer.

For information on the other options in the "Select Action" dialog, see the note on the following page.



6 To add a new profile, select **Add new profile** and click **Next**. To edit an existing profile, select the profile and click **Next**. To delete an existing profile, select the profile and click **Delete**.



Other Ways of Starting the WT-3 Setup Utility

WT-3 Setup Utility can also be started by:

- **Windows**: Clicking **Start** and selecting **All Programs** > **WT-3 Setup Utility** > **WT-3 Setup Utility**.
- **Macintosh**: Opening the "Applications : Nikon Software : WT-3 Setup Utility" folder and double-clicking the **WT-3 Setup Utility icon**.