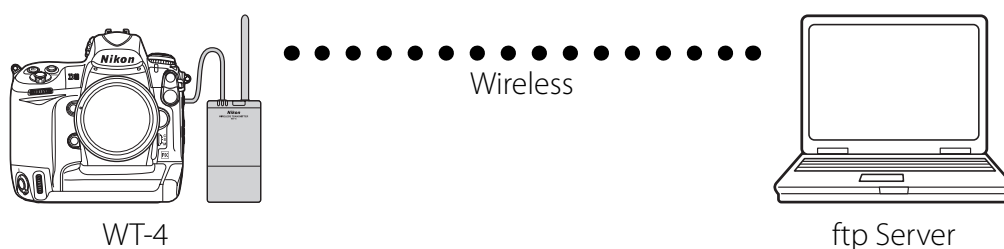


En **Configuring the WT-4 for ftp (Ad-hoc Mode)**

This document provides basic instructions on configuring the WT-4 wireless transmitter and a Mac OS X (10.5.2) ftp server for transmission over an ad-hoc (peer-to-peer) network consisting solely of the ftp server and WT-4.



Introduction

This section describes a simple wireless network consisting solely of the WT-4 and an ftp server, with no connections to other networks or devices. Follow the steps below to use the WT-4 in this type of network.

- 1: Get Ready..... pg. 2**
- 2: Assign the ftp Server an IP Address pg. 3**
- 3: Configure the Network pg. 6**
- 4: Copy the Network Profile to the Camera..... pg. 9**
- 5: Connect to the ftp Server..... pg. 14**

1: Get Ready

Equipment

Ready the following:

- A WT-4 wireless transmitter *
- A fully-charged EN-EL3e battery for the WT-4
- A Nikon D3 or D300 digital SLR camera
- A fully-charged battery for the camera (an EN-EL4a for the D3, a EN-EL3e for the D300)
- A computer with Mac OS X (10.5.2) *, the WT-4 Setup Utility* installed
- A memory card
- A USB cable
- Manuals for the above equipment

Network Settings

Note the IP addresses, encryption, and other settings that will be used in the wireless LAN. The following are intended as examples only.

- IP address for the WT-4: 192.168.1.4
- IP address for the ftp server: 192.168.1.3
- IP address of the wireless LAN access point: 192.168.1.2
- Subnet mask: 255.255.255.0
- FTP server port: 21
- Network name (SSID): WT-4
- Communication mode: Ad hoc
- Channel: 1
- Authentication: open system
- Authentication: WEP64
- Encryption key: abc12
- Key Index: 1

* WT-4 firmware version 1.1 and the WT-4 Setup Utility version 1.1 are required when using the WT-4 under Mac OS X version 10.5.2. Updates to the WT-4 firmware and Setup Utility are available on the Nikon website for your area.

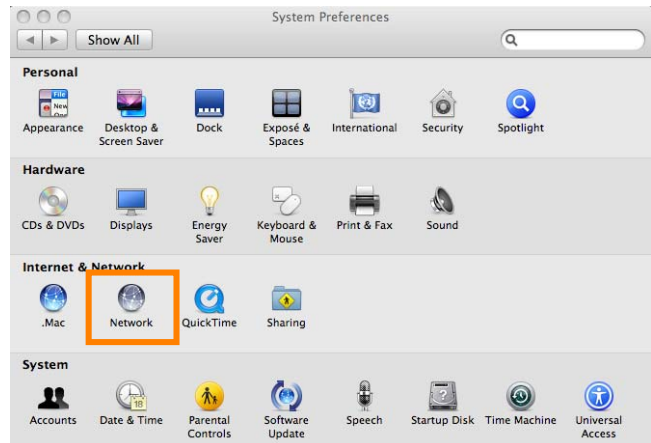
2: Assign the ftp Server an IP Address

An ftp service is provided with all supported versions of Mac OS X. Choose an address for the ftp server. The following IP address is intended as an example only.

- **IP address:** 192.168.1.3
- **Subnet mask:** 255.255.255.0
- **TCP port:** 21

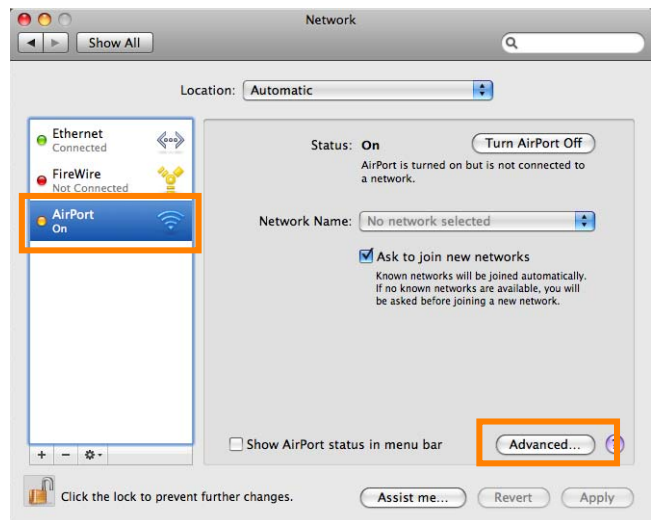
2 - 1

Open **System Preferences** and click **Network**.



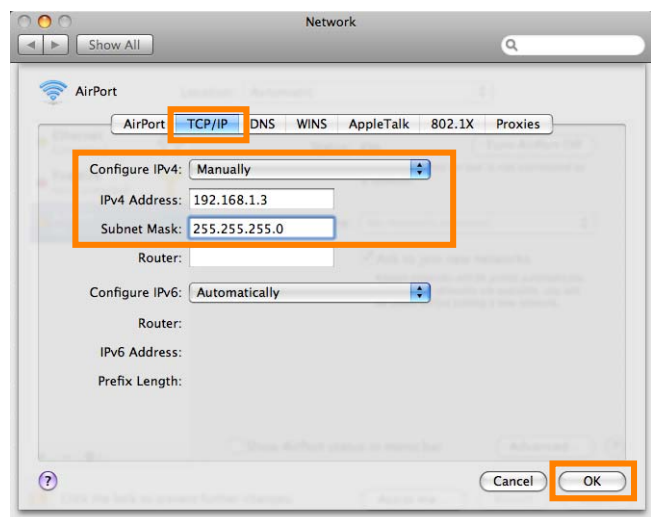
2 - 2

Select **AirPort**. Click **Advanced...**



2 - 3

Select **Manually** from the **Configure IPv4** menu and enter an IP address and sub-net mask. Click **OK** to return to the previous dialog and then click **Apply**.



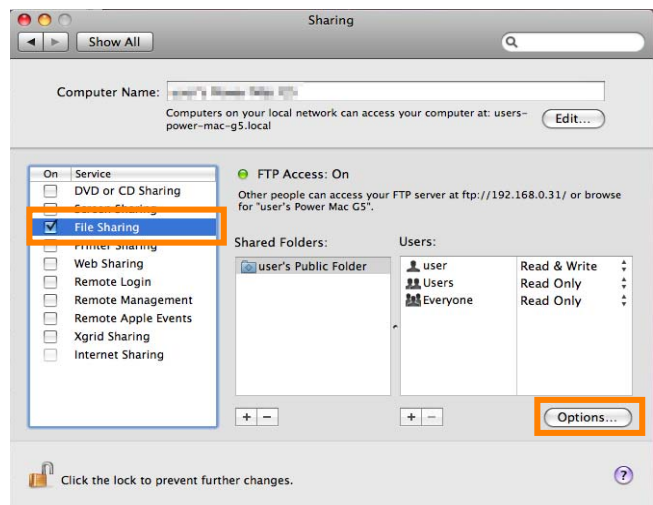
2 - 4

Click **Show All** to return to the System Preferences dialog. Click **Sharing**.



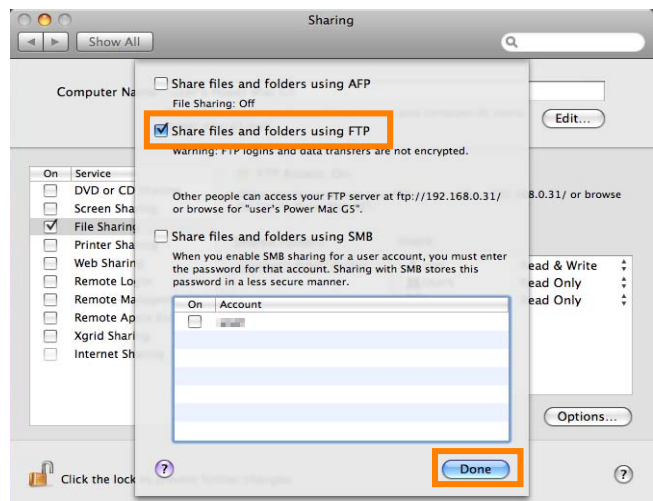
2 - 5

Select **File Sharing** and click **Options**.



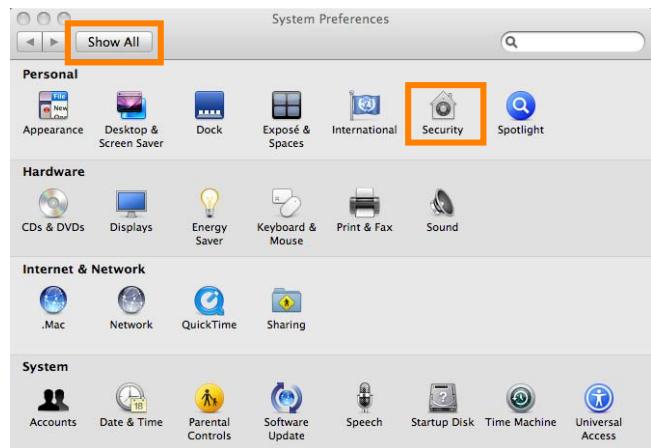
2 - 6

Select **Share files and folders using FTP** and click **Done**.



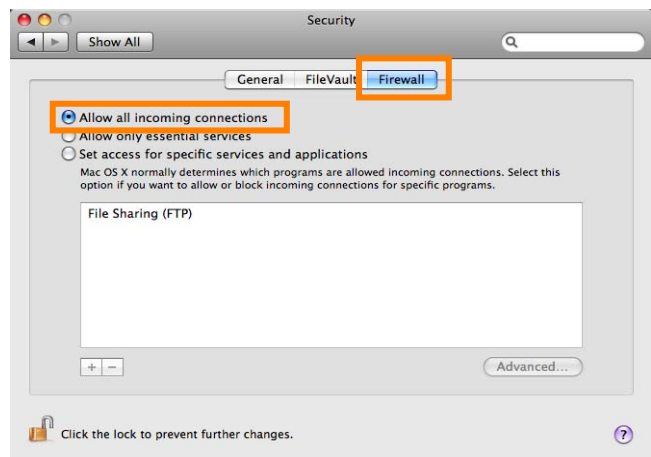
2-7

Click **Show All** to return to the “System Preferences” panel and click **Security**.



2-8

Open the **Firewall** tab and select **Allow all incoming connections**. This completes the process of setting up an ftp server.



3: Configure the Network

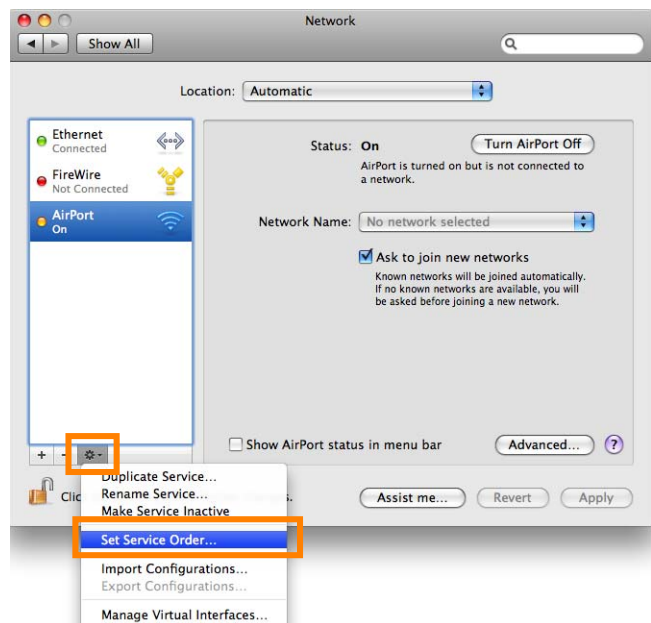
3 - 1

Open **System Preferences** and click **Network**.



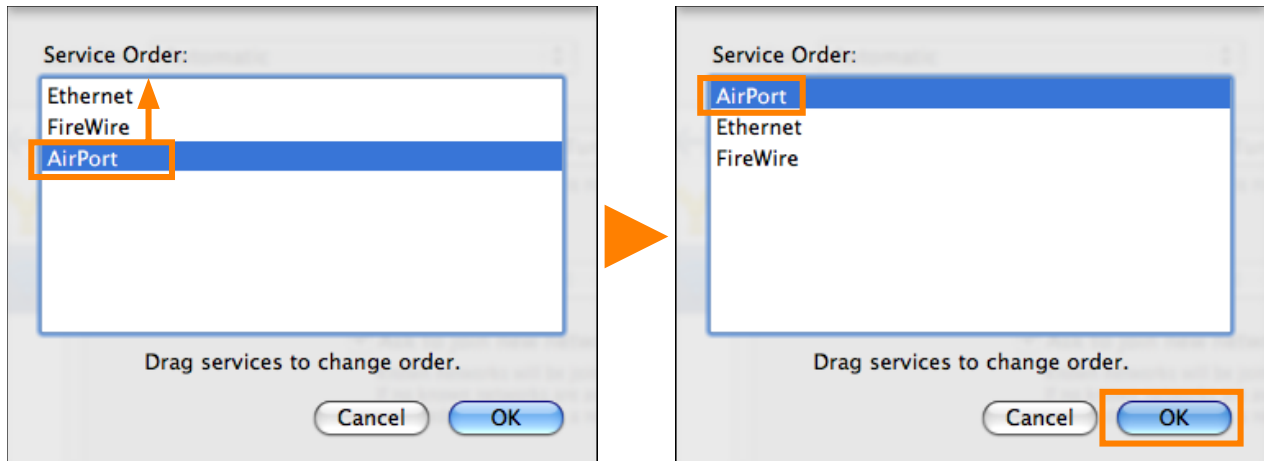
3 - 2

Click the action button and select **Set Service Order**.



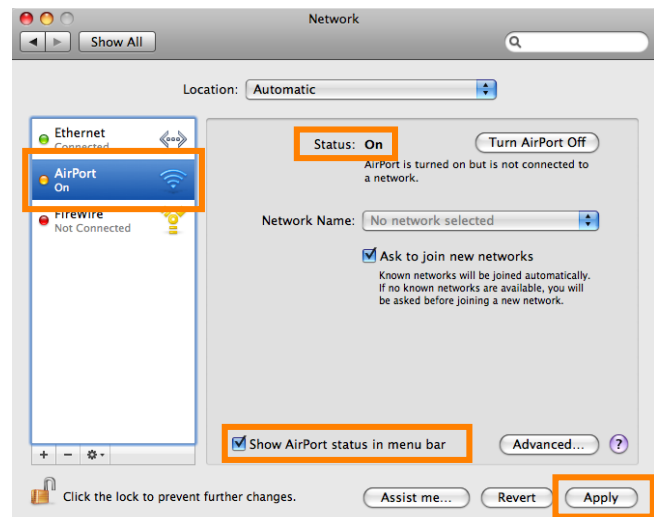
3-3

Move AirPort to the top of the services list and click **OK**.



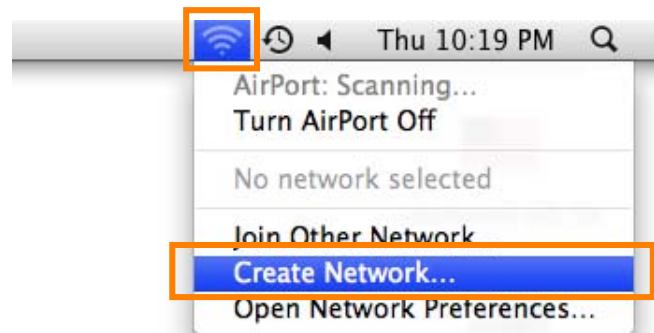
3-4

After selecting **AirPort** and confirming that the service is active and that **Show AirPort status in menu bar** is checked, click **Apply**. If AirPort is off, click **Turn AirPort On**.



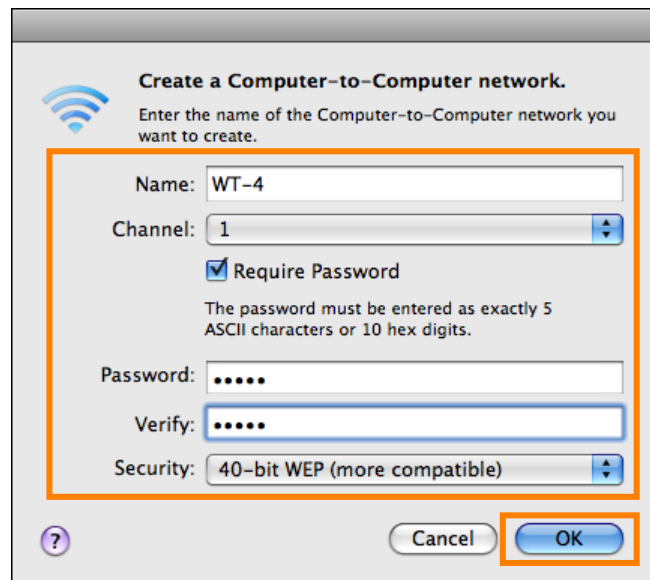
3-5

Click the AirPort status icon in the menu bar and select **Create Network...**



3-6

After choosing a network name and channel and adjusting encryption and password options as described below, click **OK**.



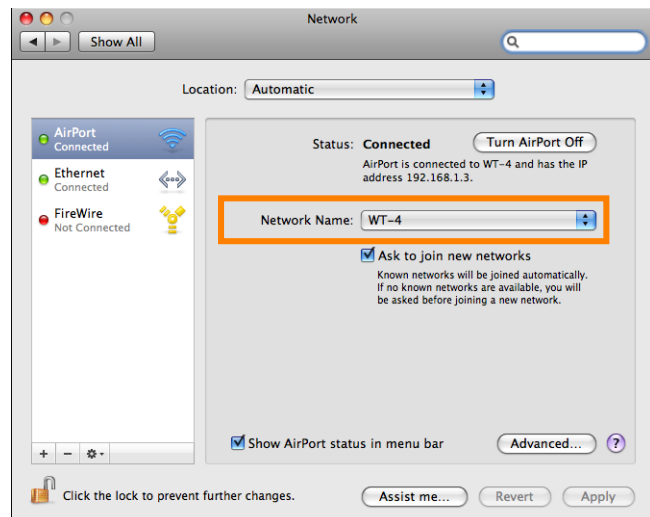
- **Name:** Enter a name of up to 32 characters. The network in this example uses the identifier **WT-4**.
- **Channel:** Choose a channel.
- **Require Password:** Select this option to enable WEP encryption.
- **Password:** If WEP encryption is enabled, enter a security key. The length of the key depends on the option selected for **Security**:
 - **40-bit (more compatible):** Enter a five-character ASCII or ten-digit hexadecimal key.
 - **128-bit:** Enter a 13-character ASCII or 26-digit hexadecimal key.

ASCII keys may contain letters, punctuation, and the numbers 0–9, hexadecimal keys the numbers 0–9 and the letters a, b, c, d, e, and f.

- **Security:** Choose the length of the WEP key.

3-7

Open the **System Preferences > Network** panel and confirm that the Network Name is the same as that specified in 3 - 6. Network setup is now complete.

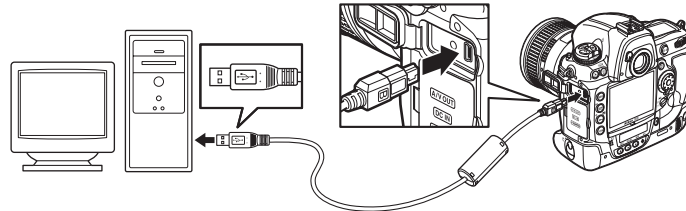


4: Copy the Network Profile to the Camera

Use the WT-4 setup utility to copy the network profile to the camera. Before proceeding, make sure that **MTP/PTP** is selected for the **USB** option in the camera setup menu.

4 - 1

After starting the computer, use the supplied USB cable to connect the camera and turn the camera on.



4 - 2

Click the **WT-4 Setup Utility** icon in the Dock.



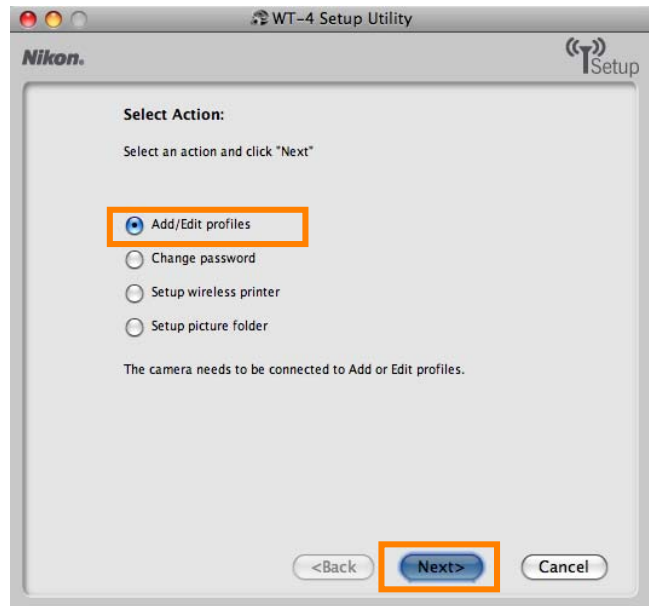
4 - 3

The dialog shown below will be displayed; click **Next**.

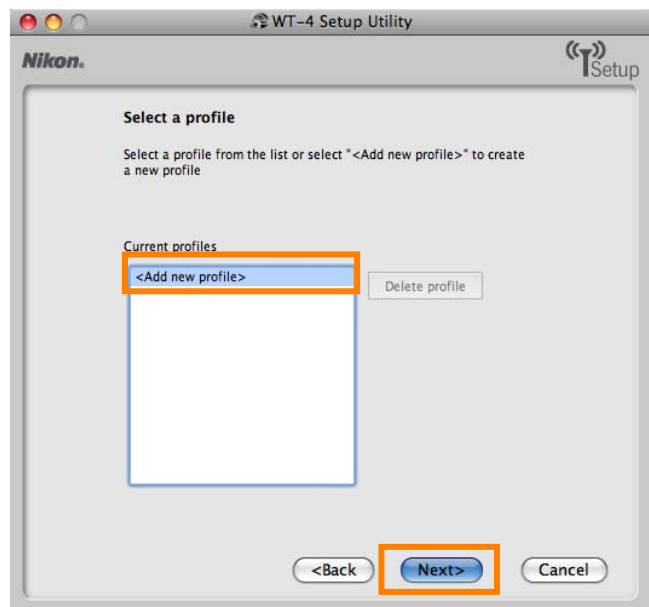


4 - 4

Select **Add/Edit profiles** and click **Next**.

**4 - 5**

Select **Add new profile** and click **Next**.



4-6

Enter the following information and click **Next**:

- **Profile name:** Enter a name of up to 16 characters (in this example, **FTP1**).
- **Profile type:** Choose **FTP Server**.
- **Interface type:** Choose **Wireless & Ethernet** for networks that include wireless, or **Ethernet only** for Ethernet-only networks.

The screenshot shows the 'Enter profile name' window in the Nikon WT-4 Setup Utility. The window title is 'WT-4 Setup Utility' and it features the Nikon logo and 'Setup' icon. The main heading is 'Enter profile name' with a sub-instruction: 'Enter a name for the new profile and select the type of profile and interface'. There are three input fields: 'Profile name' containing 'FTP1', 'Profile type' set to 'FTP Server', and 'Interface type' set to 'Wireless & Ethernet'. At the bottom, there are four buttons: 'Help', '<Back', 'Next>', and 'Cancel'. The 'Next>' button is highlighted with an orange box.

4-7

Enter the following information and click **Next**.

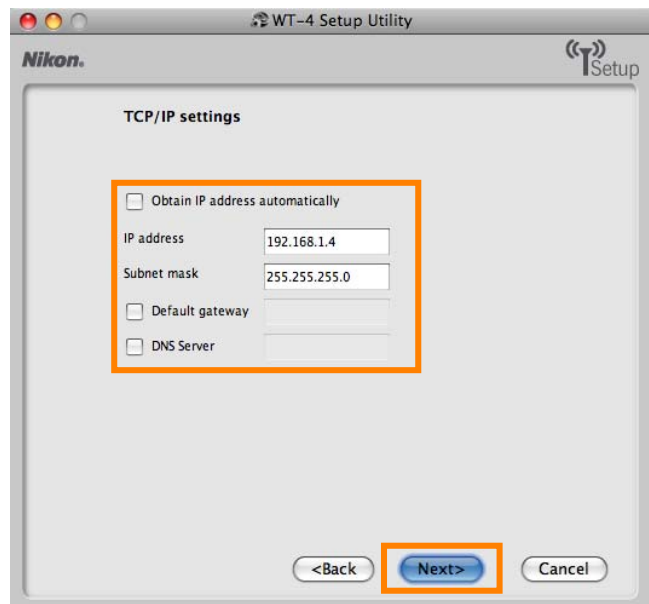
- **Network name (SSID):** WT-4
- **Communication mode:** Ad hoc
- **Channel:** 1
- **Authentication:** None (open networks only)
- **Encryption:** WEP64
- **Encryption key:** abc12
- **Key Index:** 1

The screenshot shows the 'Wireless settings' window in the Nikon WT-4 Setup Utility. The window title is 'WT-4 Setup Utility' and it features the Nikon logo and 'Setup' icon. The main heading is 'Wireless settings'. There are several input fields: 'Network name (SSID)' containing 'WT-4', 'Communication mode' set to 'Ad-hoc', 'Channel' set to '1', 'Authentication' set to 'Open', 'Encryption' set to 'WEP64', 'Encryption key' containing 'abc12' with a note '(5 characters)', and 'Key index' set to '1'. At the bottom, there are four buttons: 'Help', '<Back', 'Next>', and 'Cancel'. The 'Next>' button is highlighted with an orange box.

4 - 8

Enter the following information and click **Next**.

- **IP address:** 192.168.1.4
- **Subnet mask:** 255.255.255.0
- **Default gateway:** Remove the check from this option.
- **DNS Server:** Remove the check from this option.



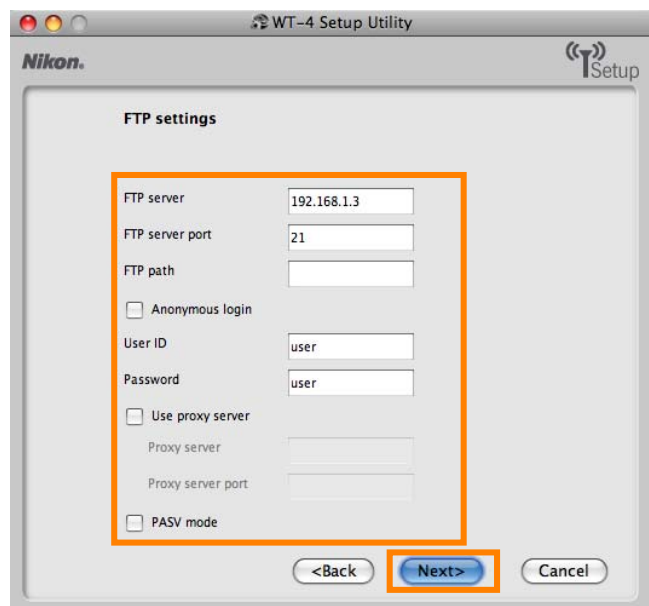
Choosing an IP Address

Be sure that the address for the WT-4 is different from the address used for the ftp server. The addresses for ftp server and WT-4 must however belong to the same class. In this example, we will use 192.168.1.3 for the ftp server and 192.168.1.4 for the WT-4.

4 - 9

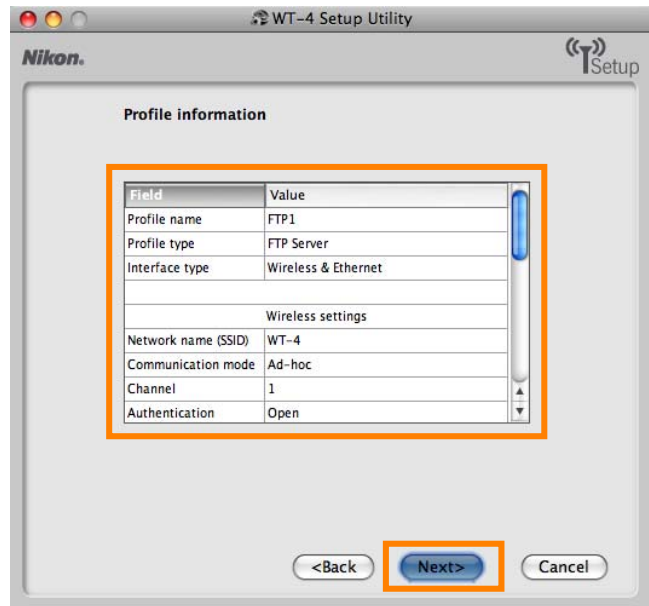
Enter ftp settings and click **Next**.

- **FTP server:** Enter IP address you selected in 2 - 3 (pg. 3; in this example, 192.168.1.3).
- **FTP server port:** 21.
- **FTP path:** Leave this field blank to upload pictures to the user's home folder.
- **Anonymous login:** Select this option for anonymous login, or leave this option unchecked to supply a **User ID** and **Password**.
- **User ID:** If you will not be using anonymous log-in, enter a User name for the ftp server.
- **Password:** If you will not be using anonymous log-in, enter the administrator password.
- **Use proxy server:** Remove the check from this option.
- **PASV mode:** Remove the check from this option.



4 - 10

Confirm that settings are correct and click **Next**.

**4 - 11**

Select **Finish wizard** and click **Next**.

**4 - 12**

Turn the camera off and disconnect the USB cable. The network profile has now been copied to the camera.

5: Connect to the ftp Server

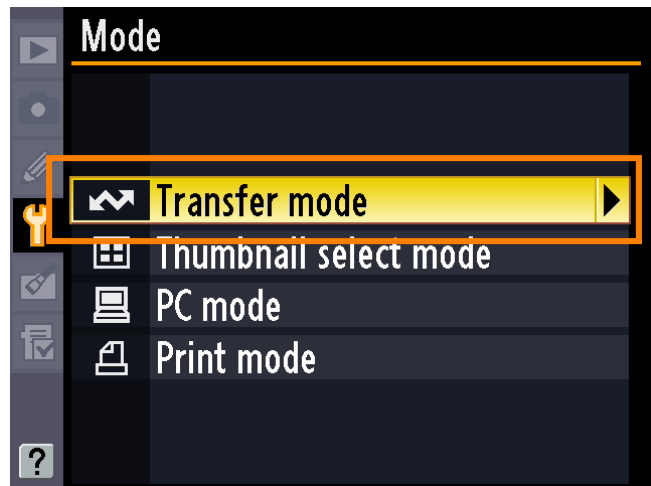
In this step, you will establish a wireless connection between the WT-4 and the ftp server. Before connecting the WT-4, select **MTP/PTP** for the **USB** option in the camera setup menu and confirm that the host computer is running and the user is logged in.

5-1

Insert a memory card in the camera, connect the WT-4, and turn the camera on.

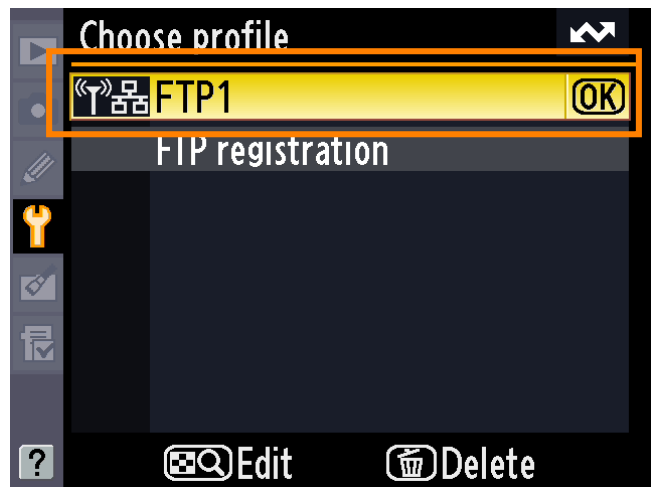
5-2

Select **Transfer mode** for the **Wireless transmitter > Mode** option in the camera setup menu.



5-3

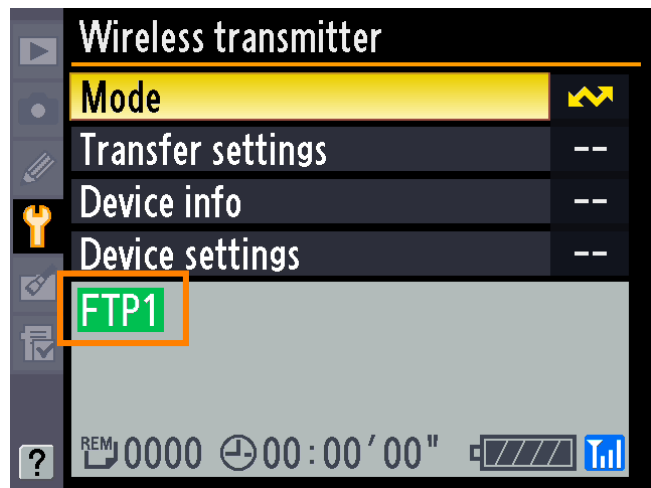
A list of available connection profiles will be displayed. Highlight the desired profile and press **OK**.



5 - 4

Return to the wireless transmitter menu and turn the WT-4 on. The profile name will be highlighted in green when a connection is established.

This completes the process of connecting to the ftp server.



 **Third-Party Security Software**

Third-party security software with firewall support may block the ftp server port, preventing access to the ftp server. This can be avoided by setting the software to allow protocols send and receive access to TCP ports 20 and 21. For more information, see the documentation for the software or firewall.