Windows Vista

Nikon

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

This document provides basic instructions on configuring the WT-4 wireless transmitter and a Windows Vista 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.

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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 Windows Vista Ultimate/Business/Enterprise edition, the WT-4 Setup Utility, and Internet Information Services (IIS) * 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

*Internet Information Services (IIS)

The Internet Information Services (IIS) supplied with Windows Vista Ultimate/Business/Enterprise can be used to create an ftp server; for more information, see "Installing IIS" (available under separate cover).

2: Assign the ftp Server an IP Address

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

<mark>2 - 1</mark>

Open the Network and Internet > Network and Sharing Center control panel.



2 - 2

Select Manage network connections



2 - 3

Right-click the **Wireless Network Connection** icon and select **Properties** from the menu that appears.

A "User Account Control" dialog will be displayed; click **Allow**.



Select Internet Protocol Version 4 (TCP/IP) and click Properties.

Wireless Network Connection Properties
Networking Sharing
Connect using:
2 August - Martine College - Second Computer
Configure
This connection uses the following items:
Client for Microsoft Networks
🗹 📮 QoS Packet Scheduler
File and Printer Sharing for Microsoft Networks
Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 4 (TCP/IPv4)
🗹 🛥 Link-Layer Topology Discovery Mapper 170 Driver
🗹 🛶 Link-Layer Topology Discovery Responder
Install Uninstall Properties
Transmission Control Protocol /Internet Protocol The default
wide area network protocol that provides communication
across diverse interconnected networks.

2 - 5

Select **Use the following IP address** and enter the IP address and subnet mask for the ftp server. Click **OK** to exit and then click **OK** to close the properties dialog. This completes the process of assigning an IP address to the ftp server.

nternet Protocol Version 4 (TCP/IPv4)	Properties ? X					
General						
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.						
Ouse the following IP address:	, 					
IP address:	192.168.1.3					
Subnet mask:	255.255.255.0					
Default gateway:	· · ·					
Obtain DNS server address automatically						
• Use the following DNS server add	resses:					
Preferred DNS server:						
Alternate DNS server:						
	Advanced					
	OK Cancel					

3: Create an ftp Server

3 - 1

Go to the **System and Maintenance** > **Administrative Tools** control panel.



3-2

Double-click Internet Information Servers (IIS) 6.0 Manager.

A "User Account Control" dialog will be displayed; click **Continue**.

	Organize ▼ ∭ Views	nd Maintenance 🕨 Administr 🗸 🕶 Open	ative Tools	▼ 4 9 5	Search
Fa	vorite Links	Name	Date modified	Туре	Size
	Documents	🛃 Computer Management	11/2/2006 9:53 PM	Shortcut	2 KB
	Distance	📷 Data Sources (ODBC)	11/2/2006 9:52 PM	Shortcut	2 KB
	Pictures	Event viewer	11/2/2000 9:35 PIVI	SHOREGE	2 KB
	Music	💱 Internet Information S	6/11/2008 10:03 AM	Shortcut	2 KB
8	Recently Changed	Res ISC SE ENILIATOR	11/2/2000 9:35 PIVI	SHOREGE	2 KB
	Searches	🛃 Local Security Policy	11/2/2006 9:54 PM	Shortcut	2 KB
	Public	Memory Diagnostics T	11/2/2006 9:51 PM	Shortcut	2 KB

3 - 3

Right-click **Default FTP Site** and select **Properties** from the menu that appears.



Select the IP address entered in 2 - 5 (pg. 4) and enter a **TCP port** number. The port number is normally 21.

Def	ault FTP Site P	roperties ? ×	<u> </u>
F	TP Site Securit	y Accounts Messages Home Directory Directory Security	
	FTP site identi	fication	
	Description:	Default FTP Site	
	IP address:	192.168.1.3	
	TCP port:	21	
	ETP site conne	ertions	
	 Unlimited 		
	Connection	ns limited to: 10	
	Connection ti	meout (in seconds): 120	
	Enable log	iging	
	Active log	ormat:	
	W3C Exte	nded Log File Format Properties	
		Current Sessions	
			4
		OK Cancel Apply Help	

3 - 5

Open the **Security Accounts** tab. To allow anonymous connections, select **Allow anonymous connections**.

* If you do not wish to allow anonymous connections, do not select this option.

Default FTP Site P	roperties	? ×
FTP Site Securi	ty Accounts Messages Home Directory D	irectory Security
V Allow anor	nymous connections	
Use the follo	wing Windows user account for anonymous a	ccess:
User name:	IUSR_USER_EN-PC	Browse
Password:	•••••	
	Allow only anonymous connections	

3 - 6

Open the **Home Directory** tab and select **A directory located on this computer**. The root directory for images uploaded from the WT-4 is listed in the **Local path** text box; choose a folder and select **Read**, **Write**, and **Log visits**.

"Local Path"

If **Allow anonymous connections** was selected in Step 3–5, you will not be authorized to access the default ftp home directory (the default directory is the \inetpub\ftproot folder on the drive to which Windowsis installed). and consequently will not be able to upload images. Create a folder in the root directory on the drive to which Windows is installed and select this folder as the home directory.

Default FTP Site Properties
FTP Site Security Accounts Message Home Directory Directory Security
The content for this resource should come from:
A directory located on this computer
FTP site directory
Local path: C:\WT-4Image Browse
Read
V Write
Ms-Dos
OK Cancel Apply Help

4: Configure the Network

4 - 1

Click the **Start** orb and select **Connect To**.



4 - 2

Click Set up a connection or network.

Sh	ow All	•	
2		Security-enabled network	De
2	Tracket March	Security-enabled network	as l

4 - 3

Select Set up a wireless ad hoc (computer-tocomputer) network and click Next.

Choo	se a connection option	
-	Connect to the Internet Set up a wireless, broadband, or dial-up connection to the Internet.	2
()	Set up a wireless router or access point Set up a new wireless network for your home or small business.	
1	Manually connect to a wireless network Choose this to connect to a hidden network or create a new wireless profile.	1
4	Set up a wireless ad hoc (computer-to-computer) network Set up a temporary network for sharing files or an Internet connection.	
0	Set up a dial-up connection Connect through a dial-up connection to the Internet.	

Click Next.



4 - 5

After entering a network name and choosing security options as described below, select **Save this network** and click **Next**.

Network name:	WT-4		
Security type:	WEP	Help me choose	
Security key/Passphrase:	•••••	Display characters	
Save this network			

- Network name: Enter a name of up to 32 characters. The network in this example uses the identifier WT-4.
- Security type: Choose from WEP and No authentication (Open).
- Security key/Passphrase: If WEP is selected for Security type, enter a security key. To enable 64-bit encryption, enter a five-character ASCII or ten-digit hexadecimal key. To enable 128-bit encryption, 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.
- Save this network: Select this option to save settings for the new network.

Click **Close**. Network setup is now complete.

The WT-4 network is ready to use	
This network will appear in the list of wireless networks and will stay active until everyone disconnects from it. Give the network name and security key (if any) to people you want to connect to this network.	
Wireless network name: WT-4	
Network security key: ••••••	
To share files, open <u>Network and Sharing Center</u> in Control Panel and turn on file sharing.	
Recommended options:	
🕏 Turn on Internet connection sharing	
Share an Internet connection on an ad hoc network	

5: 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.

5 - 1

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



<u>5 - 2</u>

Double-click the **WT-4 Setup Utility** icon on the desktop.



5 - 3

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



Select Add/Edit profiles and click Next.



<u>5 - 5</u>

Select Add new profile and click Next.



5-6

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.



Select Manual setup and click Next.

🔋 WT-4 Setup Utility	
Nikon.	(T) Setup
Select setup method	
Select whether to use manual or automatic setup to configure the IP and Wireless settings.	
C Automatic setup (recommended)	
Select network adaptor Intel(R) PRO/W 🛫	
 Manual setup (for advanced users) 	
<back next=""></back>	Cancel

5 - 8

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

<u>5 - 9</u>

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.

WT-4 Setu Nikon.	o Utility
	TCP/IP settings
	Obtain IP address automatically IP address 192.168.1.4 Subnet mask 255.255.255.0 Default gateway
	<back cancel<="" th=""></back>

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.

5 - 10

Enter ftp settings and click Next.

- **FTP server**: Enter IP address you selected in 2 5 (pg. 4; in this example, 192.168.1.3).
- **FTP server port**: Enter FTP server port you selected in 3 4 (pg. 6; in this example, 21).
- **FTP path**: Leave this field blank to upload pictures to the folder specified in 3 6 (pg. 6).
- 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.

😰 WT-4 Setu) Utility	J
Nikon.	«T» Setup	
	FTP settings	
	FTP server 192.168.1.3	
	FTP server port 21	
	FTP path	
	🔽 Anonymous login	
	User ID	
	Password	
	Use proxy server	
	Proxy server	
	Proxy server port	
	FASV mode	
	<back cancel<="" th=""><th></th></back>	
	FTP path Image: Constraint of the system Password Image: Constraint of the system Proxy server Proxy server port Image: Constraint of the system Image: Constraint of the system	

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

kon.			Se
	Profile informa	ation	
<u>г</u>		1	1.1
	Field	Value	
	Profile name		
	Profile type	FTP Server	-
	Interface type	Wireless & Ethernet	
		Wireless settings	
	Network name (SSID)	WT-4	-
	Communication mode	Ad-hoc	
	Channel	1	
	Authentication	Open	_
L			

5 - 12

Select Finish wizard and click Next.



5 - 13

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

6: Connecting 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.

6 - 1

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

6 - 2

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



6 - 3

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

	Choose profile	\sim
	们器FTP1	OK
U	FIP registration	
Y		
?	🖾 Edit 🖉 De	lete

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.



Unable to Connect

If "Connecting to network" is displayed for an extended period without a network connection being established, the ftp server may have terminated its connection to the network. Turn the WT-4 on and follow the steps below on the computer.

1

Click the "Start" orb and select Connect To.



2

Select the network name (SSID) for the WT-4 and click **Connect**.

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d network		llr.
d network		llee
	d network	d network



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.