



**WiSpan**



WiSpan Quick Start Guide



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## WHAT'S IN THE BOX

In addition to the WiSpan, your package contains the following items:

### PART NUMBER

500-164

520-079-R

520-080-R

930-029

### DESCRIPTION

DB9F-DB9F Null Modem Cable

Power Supply (domestic model only)

Power Supply (international model only)

Antenna, Omni-directional Reversed Polarity  
SMA 2.15dbi

### DOCUMENTATION:

CD-ROM containing WiSpan User Guide and documentation.

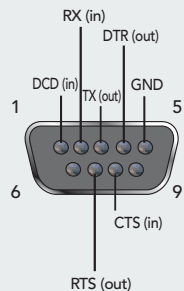
## OVERVIEW

The WiSpan is an industrial 802.11 b/g wireless-to-Ethernet bridge allowing 10/100 Ethernet-enabled devices to seamlessly connect and communicate over 802.11 b/g wireless networks. By bridging 10/100 Ethernet to 802.11 b/g, wireless mobility can be added to Ethernet devices.

This Quick Start Guide explains how to connect, configure and troubleshoot your unit using a connection to the WiSpan's Ethernet port or a serial connection to a terminal or PC running terminal emulation software, for more detailed information, refer to the WiSpan Users Guide on the product CD.

## PINOUTS

### DB9M DTE Serial Connector



The DB9M DTE setup (serial) port provides default settings for RS-232C communications running at 9600 baud, 8 bits, no parity, and 1 stop bit (9600, 8, N, 1).



### WiSpan Ethernet Connection



## CONNECTING FOR INITIAL CONFIGURATION

There are two methods of connecting to the WiSpan so that you can configure it: using the Ethernet Port and using the Setup Port.

### Using the Ethernet Port

**To connect to and initially configure the WiSpan using the Ethernet port:**

1. If a device is connected to the WiSpan's Ethernet port, disconnect it and connect a PC for configuring the WiSpan.
2. Set up the PC's Ethernet port for AutoIP or assign a static IP address in the AutoIP range (169.254.x.x).
3. Use a utility such as DeviceInstaller to locate the WiSpan's MAC address and IP address. This utility must use the Lantronix access protocol to query the WiSpan. (See Installing DeviceInstaller on page 6.)
4. Telnet to port 9999 to configure the WiSpan to access Setup Mode. (telnet x.x.x.x. 9999)
5. Press **Enter** within 5 seconds to display the **Change Setup** menu.
6. Configure the unit as described in Configuration on page 7.
7. Disconnect the PC and reconnect the original device to the WiSpan's Ethernet port.

## CONNECTING FOR INITIAL CONFIGURATION CONTINUED...

### To install the DeviceInstaller:

1. Insert the product CD into your CD-ROM drive.  
If the CD does **not** launch automatically:
  - a. Click the **Start** button on the Task Bar and select **Run**.
  - b. Enter your CD drive letter, colon, backslash, **deviceinstaller.exe** (e.g., **E:\deviceinstaller.exe**).
2. Click the **DeviceInstaller** button. The installation wizard window displays.
3. Respond to the installation wizard prompts. (When prompted to select an installation type, select **Typical**.)
4. Once you have installed DeviceInstaller, follow the instructions in DeviceInstaller's Online Help to locate the WiSpan.

### Using the Setup Port

#### To connect to and initially configure the WiSpan using the setup port:

1. Connect one end of the supplied DB9F – DB9F null modem serial cable to the WiSpan's setup port.
2. Connect the other end of the DB9 serial cable to a terminal or a PC's serial COM port.

## CONNECTING FOR INITIAL CONFIGURATION CONTINUED

3. With a connection to the setup port, open a terminal emulation application (e.g. HyperTerminal) on the PC. The default serial settings are 9600 baud, 8 bits, no parity, 1 stop bit, and no flow control (9600, 8, N, 1).
4. Enter Setup Mode by simultaneously connecting the power supply and holding down the **x** key.
5. Upon connection, press **Enter** within 5 seconds to display the **Change Setup** menu.

## CONFIGURATION

This Quick Start describes how to install and configure the WiSpan unit to get it up and running. You must configure the WLAN settings for the WiSpan to communicate on a wireless network.

**Note:** You only need to configure the WiSpan's IP address and other network settings if you want to discover and configure your WiSpan device from the wired network in the future. These settings only apply to communication on the Ethernet interface.

**CONFIGURATION CONTINUED...**

**Note:** Current settings are displayed in parentheses.

**Configure Server Settings**

- To configure the Server settings, select **0** from the **Change Setup** menu and edit the following fields:

- IP Address:** The IP address must be set to a unique value in the network. Type each octet and press **Enter** between each section.

IP Address: IP Address: (0) (0) (0) (0) \_

- Set Gateway IP Address:** The gateway address should be the IP address of the router connected to the same LAN segment as the WiSpan unit.

Set Gateway IP Address (N)? N

- Netmask:** The netmask defines the number of bits taken from the IP address that are assigned for the host part. Enter the number of host bits. If you leave this blank and press **Enter**, the WiSpan will set the subnet mask to a standard netmask for the IP address assigned in step a) above.

Netmask: Number of Bits for Host Part  
(0=default)(0)\_

**CONFIGURATION CONTINUED...**

- Set DNS Server IP Address:** The DNS server allows the name of a remote machine to be resolved automatically. The default is **N** (No), indicating the DNS server address has not been set. To set the DNS server address, type **Y**. At the prompt, enter the DNS server address. If the device is DHCP enabled, the DHCP server provides the DNS server IP address, which will override this configured value.

**Note:** This setting is applicable only in Manual Connection mode.

Set DNS Server IP addr (N) ?

- Change Telnet Configuration Password:** Change the Telnet configuration password to prevent unauthorized access to the Setup Menu.

Change telnet config password (N) ? \_

**Configure WLAN Settings**

- To configure the WLAN settings, select **4** from the **Change Setup** menu and edit the following fields:

- Topology:** Select **Infrastructure** (ESS) or **Adhoc** (IBSS). Infrastructure mode communicates with Access Points. Ad Hoc mode communicates only with other clients.

Topology 0=Infrastructure, 1=Adhoc (0) ?

## CONFIGURATION CONTINUED...

- b) **Network Name:** Enter the network name (SSID). The default is displayed in parentheses.

Network name (SSID) (LTRX\_IBSS) ?

- c) **Channel:** If **Adhoc** was selected, select the channel. Channel 11 is the default.

Channel (11) ?

- d) **Security Suite:** As an additional security measure, enable WEP on the WiSpan.

Security 0=none, 1=WEP, 2=WPA, 3=WPA2/802.11i (0) ? \_

*Note:* If **Adhoc** is selected, choice 2=*WPA* does not appear.

- e) **Authentication:** When WEP is enabled, select an authentication scheme.

Authentication 0=open, 1=shared (0) ? \_

- f) **Encryption:** When WEP is enabled, select the encryption type.

Encryption 0=WEP64, 1=WEP128 (0) ? \_

- g) **Display current key (N):** Select **Y** to display the current key.

## CONFIGURATION CONTINUED...

- h) **Change Key:** Displays when WEP is enabled. Select **Y** to change the encryption key.

Change Key (N) ? \_

- i) **Key type:** 0=Hex, 1=Passphrase (0) ?

- j) **Enter key:** Enter the key at the prompt. **WEP key must be entered in HEX format (0-9 A-F) xx-xx-xx-xx-xx-xx-xx-xx-xx-xx-xx-xx.**

- k) **TX key index:** Select the WEP key used for transmissions from your access point. Enter a value from 1 to 4.

- l) **Fixed or Automatic Data Rate:** Select **0** to set a fixed data rate or select **1** to set an automatic data rate.

TX Data rate: 0=fixed, 1=auto fallback <1> ?

**Transmission Data Rate:** If the **TX Data rate** (above) is **fixed**, the selected data rate is the WiSpan's fixed transmission rate. If the **TX Data rate** is **auto fallback**, the selected data rate is the WiSpan's maximum data rate.

TX Data rate 0=1, 1=2, 2=5.5, 3=11  
4=18, 5=24, 6=36, 7=54 Mbps (0) ? \_

## CONFIGURATION CONTINUED

- m) **Enable Power Management:** Select **Y** to reduce the WiSpan's overall power consumption. **Note:** Enabling power management increases the unit's network response time.

Enable power management (N) ? \_

- n) **Enable Soft AP Roaming:** Choose to enable **Y** (Yes) or disable **N** (No) Lantronix's Smart Roam technology. The default value is **N**.  
If enabled, SmartRoam manages the dynamic list of APs belonging to the same network as the AP to which the WiBox is currently associated and stores relevant selection criteria for this list.

Enable Soft AP Roaming (Y) ?

2. Upon completing the IP and WLAN settings configuration, select menu option **9** to save and exit the WiSpan Setup Mode.

## TEST CONNECTION

The WiSpan is ready for wireless connection. To verify that the WiSpan established a WLAN connection, open a browser from a PC on the same wireless network and enter the IP address of the WiSpan in the URL field, <http://xxx.xxx.xxx.xxx>. The WiSpan web interface should display.

## TROUBLE SHOOTING

### WiSpan Connection LEDs

SERIAL LEDS	MEANING
Power LED: green, steady ON	<b>Power is on.</b>
Wireless Link LED: blinking yellow Power Management: OFF	<b>Unit is associating.</b>
Wireless Link LED: OFF Power Management: OFF	<b>Unit is associated.</b>
Wireless Link LED: yellow ON Power Management: ON, OFF	<b>Steady ON initially and during search.</b>
Wireless Link LED: blinking yellow Power Management: ON	<b>Unit is associated, transmit/receive.</b>
Ethernet Link LED: green, steady on	<b>Active network connection.</b>

## CONTACT

For questions and technical support, please check our online knowledge base at [www.lantronix.com/support](http://www.lantronix.com/support)

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