Willtek

Getting Started Manual

7311 Lector Basic
7312 Lector Enhanced
7315 Scriptor

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Ordering information This guide is a product of Willtek Communications, issued as part of the Willtek 7310 Lector and Scriptor family of software products. The ordering number for a published guide is M 294 310. The ordering number for the product depends on the exact model as follows:

Table 1 ***Lector and Scriptor ordering numbers***

Model	Ordering number
7311 Lector Basic	M 897 309
7312 Lector Enhanced	M 897 310
7315 Scriptor	M 897 311

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About This Guide

This section contains the following basic information:

– "Purpose and scope" on page vi
– "Assumptions" on page vi
– "Related information" on page vi
– "Technical assistance" on page vii
– "Conventions" on page viii

Purpose and scope

The purpose of this guide is to help you successfully install the Lector and Scriptor software with software drivers for instrument remote control.

Assumptions

This guide is intended for novice users who want to use Lector and Scriptor effectively and efficiently. We are assuming that you have basic computer experience and are familiar with basic telecommunication concepts and terminology.

Related information

Use this guide in conjunction with the following information:

M 294 309: Lector & Scriptor user's guide

Technical assistance

If you need assistance or have questions related to the use of this product call Willtek's technical support. You can also contact Willtek by e-mail at customer.support@willtek.com.

Table 1 ***Technical support contacts***

Region	Phone number	Fax number
Europe, Middle East, Asia, Africa	+49 (0)89 99641 311	+49 (0)89 99641 440
Americas	+1 973 386 9696	+1 973 386 9191
China	+86 21 5836 6669	+86 21 5835 5238

Conventions

This guide uses naming conventions and symbols, as described in the following table.

Table 2 *Typographical conventions*

Description	Example
User interface actions appear in this **typeface**.	On the Status bar, click **Start**.
Buttons or switches that you press on a unit appear in this **TYPEFACE**.	Press the **ON** switch.
Code and output messages appear in this `typeface`.	`All results okay`
Text you must type exactly as shown appears in this **`typeface`**.	Type: **`a:\set.exe`** in the dialog box.
Variables appear in this **<typeface>**.	Type the new **<hostname>**.
Book references appear in this **typeface**.	Refer to **Newton's Telecom Dictionary**
A vertical bar | means "or": only one option can appear in a single command.	`platform [a|b|e]`
Square brackets [ ] indicate an optional argument.	`login [platform name]`
Slanted brackets < > group required arguments.	<`password`>
A plus sign + indicates simultaneous keystrokes.	Press **Ctrl+s**
A comma indicates consecutive keystrokes.	Press **Alt+f,s**
A slanted bracket indicates choosing a submenu from menu.	On the menu bar, click **Start > Program Files**.

Preparation

1

This chapter describes how to prepare for the Lector and Scriptor installation. The topics discussed in this chapter are as follows:

– "Scope of delivery" on page 2
– "Software requirements" on page 2
– "Hardware requirements" on page 2
– "Setting up the hardware" on page 3

Scope of delivery

When unpacking Lector & Scriptor, ensure that you do not miss any of the following items:

- Lector & Scriptor software CD
- Manual CD
- USB dongle (7312 Lector Enhanced and 7315 Scriptor only)

Software requirements

Lector and Scriptor can be installed and run on every PC with Microsoft Windows NT, Windows 2000, Windows XP or Windows Vista. You will need to log in with administrator rights to install the software.

To control a 4400 Series Mobile Phone Tester, the instrument will need firmware version 6.20 or higher. In order to take advantage of all the latest features, the latest firmware is required.

To control a 3100 Mobile Fault Finder, the instrument will need firmware version 11.20 or higher. In order to take advantage of all the latest features, the latest firmware is required.

To make use of the Bluetooth and the Intersystem Handover capabilities, software version 12.00 or higher of the 4400 or 3100 is required.

Hardware requirements

Before installing Lector and Scriptor on a PC, make sure that the PC has

- at least 60 Mb of free hard disk space
- a CD drive
- a free RS-232 or USB port (for initial setup of the 3100 Mobile Fault Finder)
- a free USB port for the USB dongle if you want to install 7312 Lector Enhanced and 7315 Scriptor
- a screen size of at least 1024 x 768 pixels

In addition, the PC needs an interface to the instrument to be controlled. Ensure that both the PC and the instrument can be connected using one of the following interfaces supported by Lector and Scriptor:

– TCP/IP
– GPIB (National Instruments interface)
– USB
– RS-232

Setting up the hardware

Before starting a test, the PC should be connected to the instrument and the USB dongle should be installed (Lector Enhanced and Scriptor only). The table below summarizes the remote control interfaces supported.

Table 3 ***Interfaces supported by the instrument types***

	RS-232/USB	TCP/IP	GPIB
2201	✓	✓	
2303		✓	
3100	✓	✓	✓[a]
3110	✓	✓	
4100 series	✓		
4200 series	✓		
4300 series	✓		✓
4400 series	✓	✓[b]	✓

a. Optional (3180 GPIB - IEEE 488.2 Option required)
b. Instruments with a serial number below 0911001 require the 4478 TCP/IP Option

Please note the following particularities.

TCP/IP

The LAN connector of your instrument can be connected with the PC in two different ways:

Existing TCP/IP network with router or hub: Use a CAT5 or CAT6 LAN cable to connect the instrument to the LAN. Similarly, also connect the PC to the LAN.

Point-to-point connection: Use a crossed-line LAN cable to directly connect the instrument to the PC.

Lector Enhanced and Scriptor

To make use of the advanced features of 7312 Lector Enhanced and 7315 Scriptor, the USB dongle provided as part of the product must be installed.

After installing, but before running the software, slide the USB dongle into a free USB port of the PC.

After starting the Lector and Scriptor software, the title bar of the Lector or Scriptor menu should indicate the name of the product you have purchased, i.e. either ''7312 Lector Enhanced'' or ''Willtek 7315 Scriptor''.

Installation

2

This chapter describes how to install Lector and Scriptor. The topics discussed in this chapter are as follows:

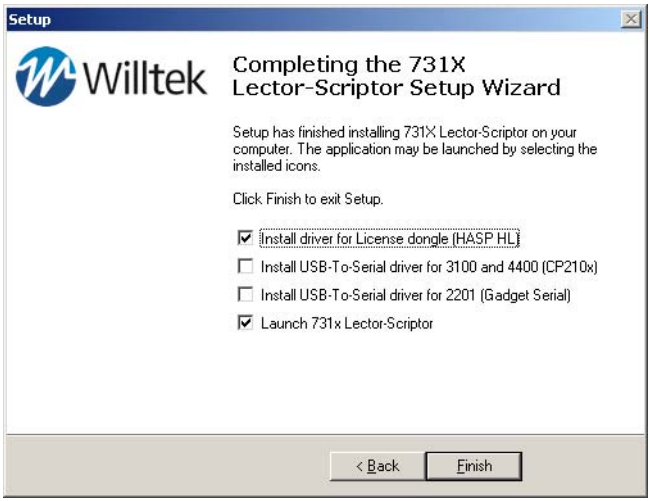
– "Setting up Lector with the 4107S" on page 6
– "Setting up Lector with the 4201S or 4202S" on page 10
– "Setting up Lector with the 2201 ProLock" on page 14
– "Setting up Lector with the 3100 Mobile Fault Finder" on page 20

Setting up Lector with the 4107S

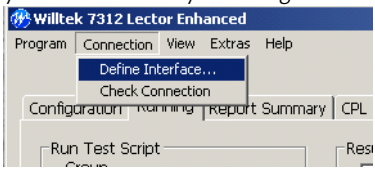
1 Insert the Lector & Scriptor installation CD in the CD drive of your computer.

2 If the Autostart menu appears, click on "Install Lector or Scriptor". Alternatively, use the Windows Explorer to start the Setup.exe program from the CD.

3 Follow the onscreen instructions during the installation. In most cases it is advisable to accept the proposed settings.
Make sure the HASP HL driver is installed.



4 When the installation is completed, start Lector (if it does not start automatically). Define the connection between the PC and your instrument by selecting **Connection > Define Interface**.



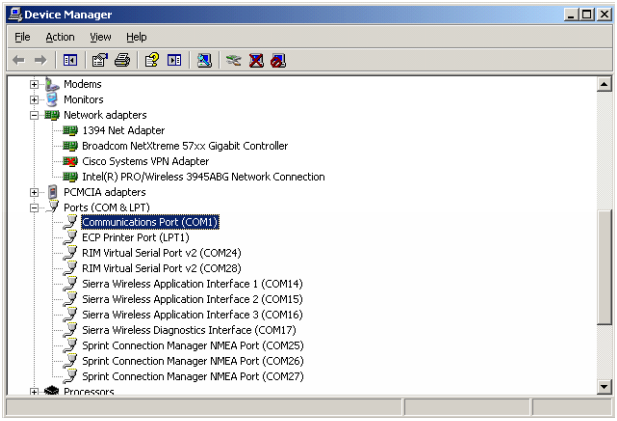
5 Select the product: **4100**.

6 Select the interface: **USB/RS-232**.

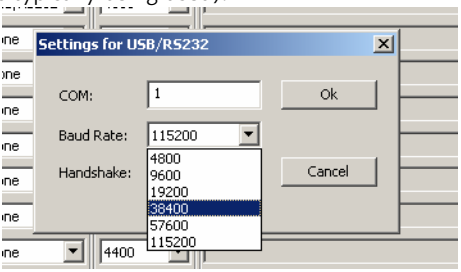
7 Connect the instrument to the PC using the selected connection.

8 Define the interface settings for the RS-232 connection:

a Select the COM port.
The COM port is usually COM1 when RS-232 is used. If any USB-to-RS-232 adapter is used, you can look up the COM port at: **Start > Control Panel > System > Hardware > Device Manager > Ports**.



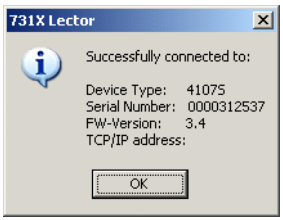
b Change the baud rate to the one set up at the 4100 (38400 is typically being used).



c Click **OK**.

9 Click **OK** again to close the Connection menu.

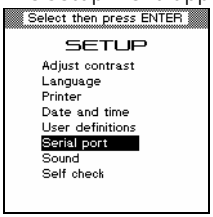
10 Wait for the confirmation that the instrument has been found:



If the message does not appear within half a minute, proceed as follows:

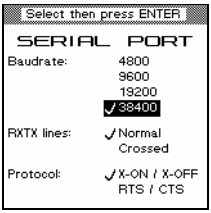
a Check the configuration settings of your 4100, and change accordingly.

b Press the **SETUP** button on the 4100.
The Setup menu appears.

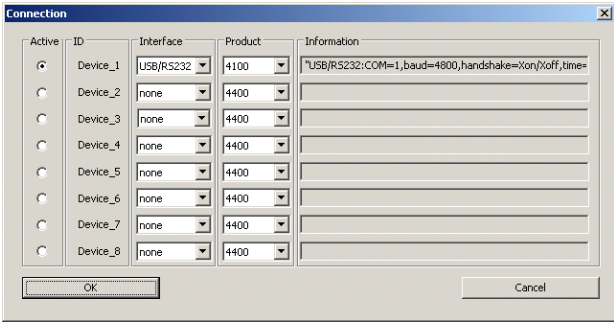


c Select Serial Port in the Setup menu and press ENTER.

d Adjust the Serial Port settings according to the screenshot below:



e In the Lector Connection pop-up menu, click **OK**.



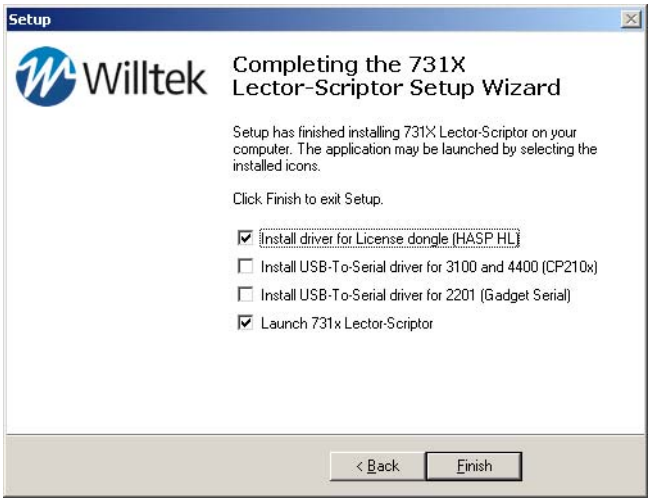
11 Continue with "Installing the manufacturer-specific test scripts and the coupling factor database" on page 26.

Setting up Lector with the 4201S or 4202S

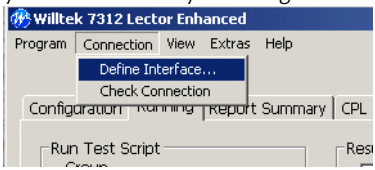
1 Insert the Lector & Scriptor installation CD in the CD drive of your computer.

2 If the Autostart menu appears, click on "Install Lector or Scriptor". Alternatively, use the Windows Explorer to start the Setup.exe program from the CD.

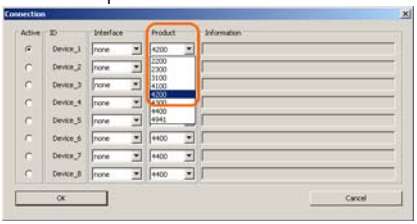
3 Follow the onscreen instructions during the installation. In most cases it is advisable to accept the proposed settings.
Make sure the HASP HL driver is installed.



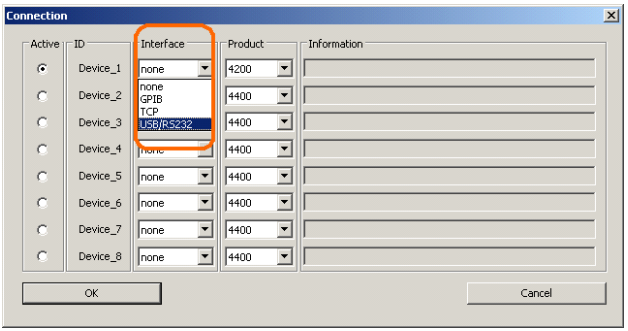
4 When the installation is completed, start Lector (if it does not start automatically). Define the connection between the PC and your instrument by selecting **Connection > Define Interface**.



5 Select the product: **4200**.



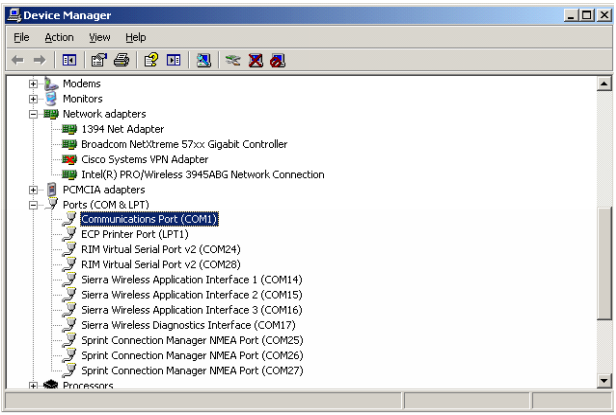
6 Select the interface: **USB/RS-232**.



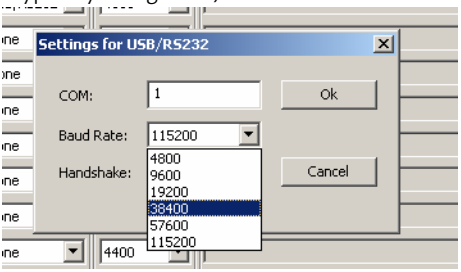
7 Connect the instrument to the PC using the selected connection.

8 Define the interface settings for the RS-232 connection:

a Select the COM port.
The COM port is usually COM1 when RS-232 is used. If any USB-to-RS-232 adapter is used, you can look up the COM port at: **Start > Control Panel > System > Hardware > Device Manager > Ports**



b Change the baud rate to the one set up at the 4200 (38400 is typically being used).



c Click **OK**.

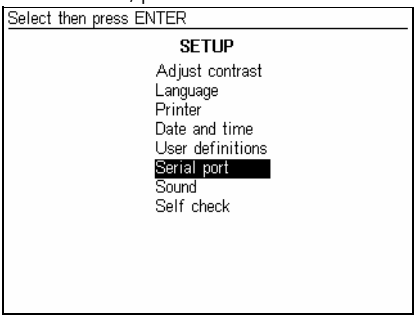
9 Click **OK** again to close the Connection menu.

10 Wait for the confirmation that the instrument has been found:

If the message does not appear within half a minute, proceed as follows:

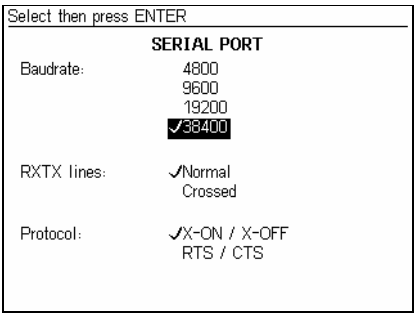
a Check the configuration settings of your 4200, and change accordingly.

b On the 4200, press the **SETUP** button.

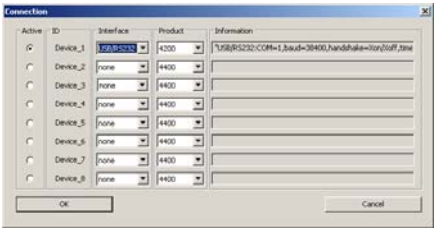


c Select **Serial Port** in the Setup menu and press **ENTER**. The Serial Port menu appears.

d Adjust the Serial Port settings according to the screenshot below:



e In the Lector Connection pop-up menu, click the **OK** button.



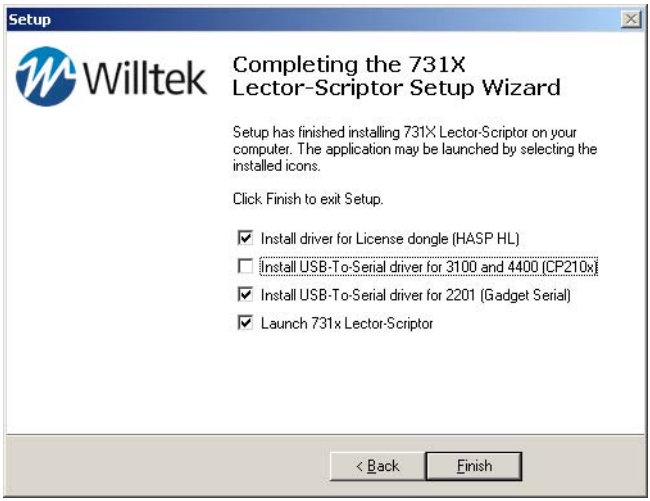
11 Continue with "Installing the manufacturer-specific test scripts and the coupling factor database" on page 26.

Setting up Lector with the 2201 ProLock

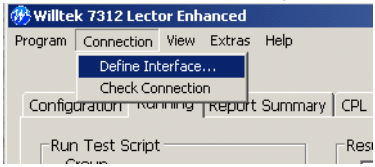
1 Insert the Lector & Scriptor installation CD in the CD drive of your computer.

2 If the Autostart menu appears, click on "Install Lector or Scriptor". Alternatively, use the Windows Explorer to start the Setup.exe program from the CD.

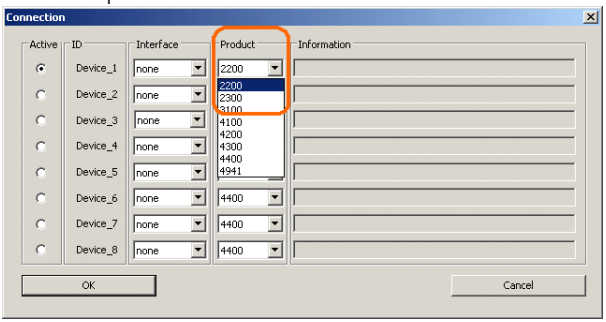
3 Follow the onscreen instructions during the installation. In most cases it is advisable to accept the proposed settings.
Make sure the HASP HL driver and the USB-to-serial driver for the 2201 are installed.



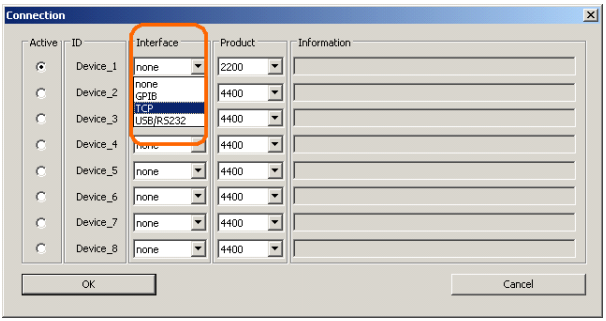
4 When the installation is completed, start Lector (if it does not start automatically). Define the connection between the PC and your instrument by selecting **Connection > Define Interface**.



5 Select the product: **2200**.



6 Select the interface: **USB/RS-232** or **TCP**.

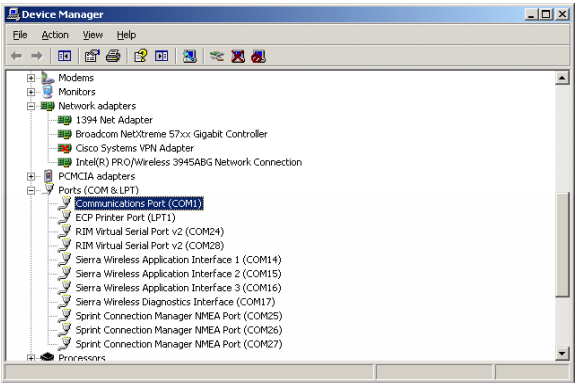


7 Connect the instrument to the PC using the selected connection.

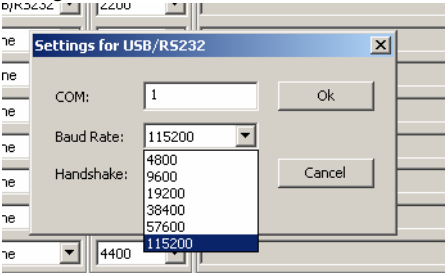
8 Define the interface settings for the selected connection (either RS-232 or USB or TCP/IP):

a RS-232

1 Select the COM port.
The COM port is usually COM1 when RS-232 is used. If any USB-to-RS-232 adapter is used, you can look up the COM port at:
Start > Control Panel > System > Hardware > Device Manager > Ports



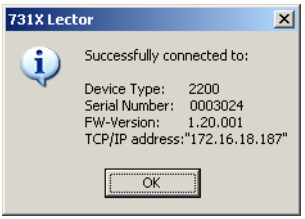
2 Change the baud rate to **115200**.



3 Click **OK**.

4 Click **OK** again to close the Connection menu.

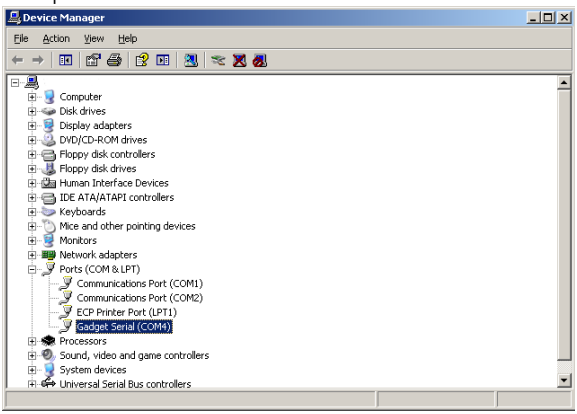
5 Wait for the confirmation that the instrument has been found:



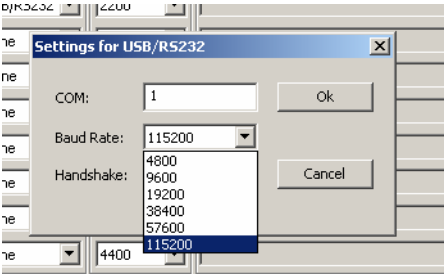
If the 2200 does not respond within half a minute, please check the connection to the instrument.

b USB

1 Select the COM port.
You can look up the COM port with the device manager:
Start > Control Panel > System > Hardware > Device Manager > Ports
Look for the Gadget Serial connection and check which COM port is used for it.



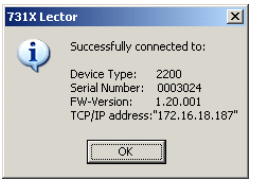
Apply the COM port number in the Connection menu within Lector. The baud rate should be set to **115200**.



Click **OK**.

2 Click **OK** again to close the Connection menu.

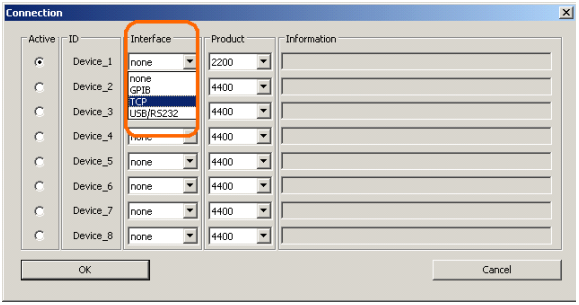
3 Wait for the confirmation that the instrument has been found:



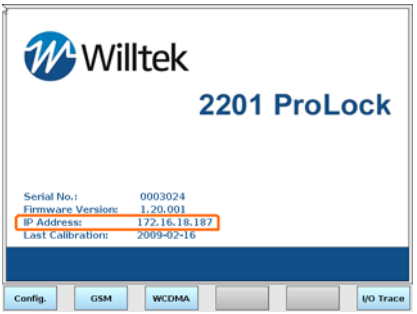
If the 2200 does not respond within half a minute, please check the connection to the instrument.

c TCP/IP

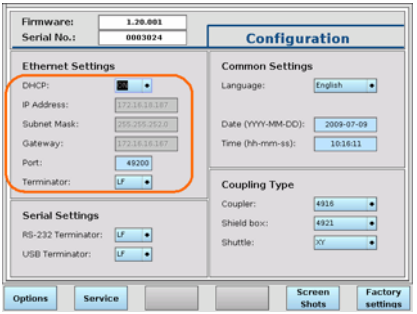
1 Select **TCP** for the interface.



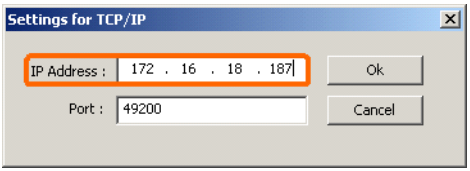
2 Read the ProLock's IP address which is displayed in the start menu of the 2201 ProLock.



If the ProLock displays an IP address of 0.0.0.0, it is not properly connected to the LAN or the computer. Check the configuration of the 2201 ProLock, the Ethernet settings and the cable connections.

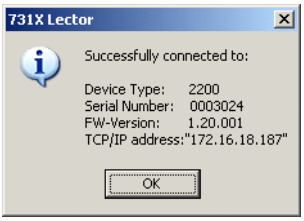


3 Enter the IP address in the Settings field for TCP/IP, and click **OK**.



4 In the Lector Connection pop-up menu, click the **OK** button.

5 Wait for the confirmation that the instrument has been found:



6 If the 2200 does not respond please check the connection to the instrument.

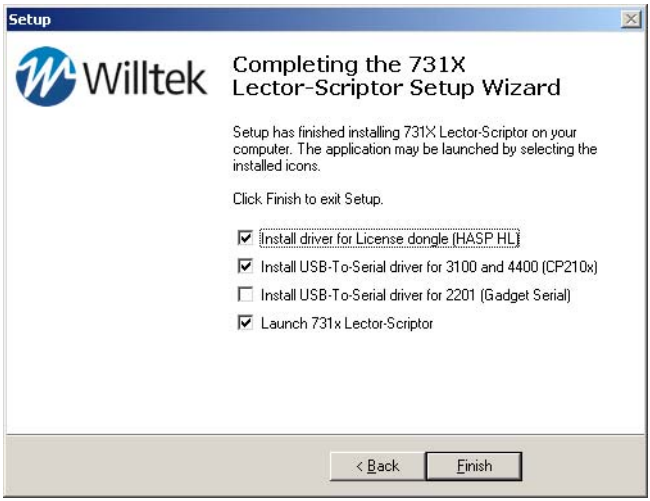
9 Continue with "Installing the manufacturer-specific test scripts and the coupling factor database" on page 26.

Setting up Lector with the 3100 Mobile Fault Finder

1 Insert the Lector & Scriptor installation CD in the CD drive of your computer.

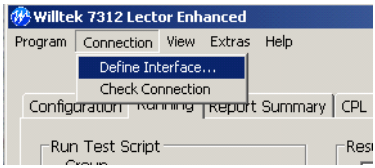
2 If the Autostart menu appears, click on "Install Lector or Scriptor". Alternatively, use the Windows Explorer to start the Setup.exe program from the CD.

3 Follow the onscreen instructions during the installation. In most cases it is advisable to accept the proposed settings.
Make sure the HASP HL driver and the USB-to-serial driver for 3100 and 4400 are installed.

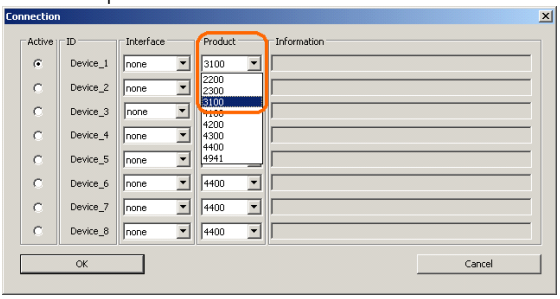


4 When the installation is completed, connect the instrument to the PC using the selected connection.

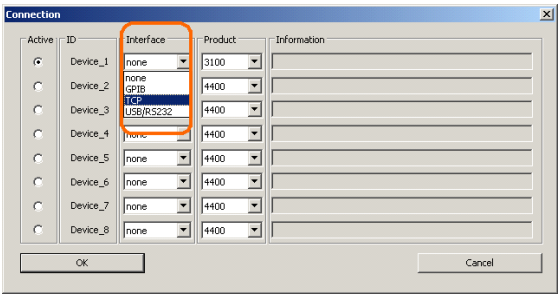
5 Start Lector (if it does not start automatically). Define the connection between the PC and your instrument by selecting **Connection > Define Interface**.



6 Select the product: **3100**.



7 Select the interface: **USB/RS-232**, **TCP** or **GPIB** (3100 option).

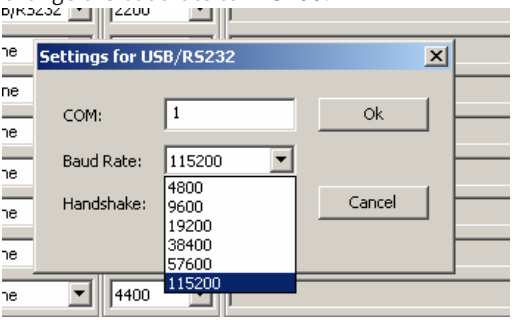


8 Define the interface settings for the selected connection (USB, RS-232, TCP or GPIB):

a RS/232

1 Select the COM port.
The COM port is usually COM1 when RS-232 is used.

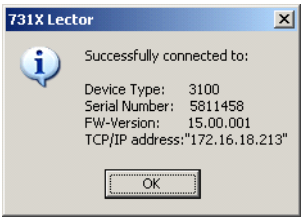
2 Change the baudrate to **115200**.



3 Click **OK**.

4 Click **OK** again to close the Connection menu.

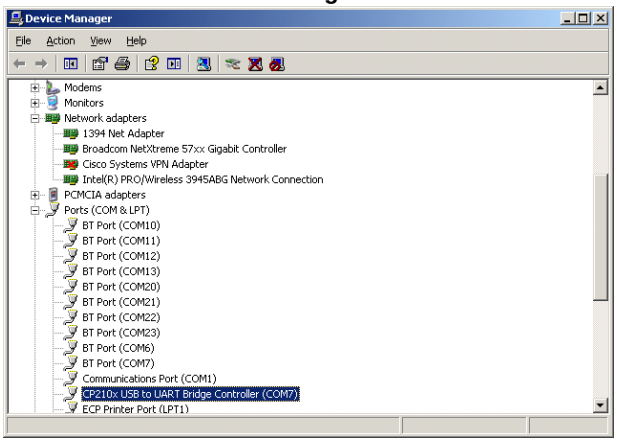
5 Wait for the confirmation that the instrument has been found:



6 If the message does not appear within half a minute, check the connection to the instrument.

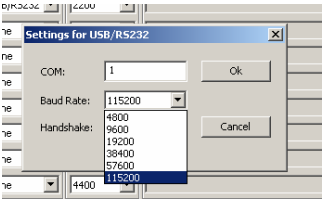
b USB

1 Select the COM port.
If any USB-to-RS-232 adapter is used, you can look up the COM port at: **Start > Control Panel > System > Hardware > Device Manager > Ports**.



Look for the CP210x USB to UART Bridge Controller connection and check which COM port it uses.

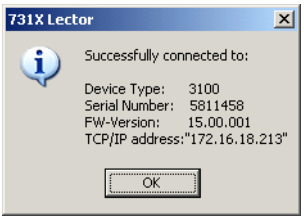
2 In the Settings for USB/RS232 menu, enter the COM port number. Select a baudrate of **115200**.



3 Click **OK**.

4 Click **OK** again to close the Connection menu.

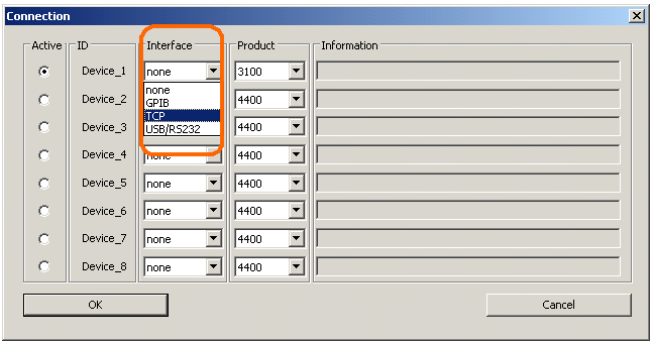
5 Wait for the confirmation that the instrument has been found:



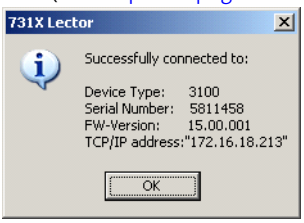
6 If the message does not appear within half a minute, check the connection to the instrument.

c TCP/IP

1 Select the interface: **TCP**.

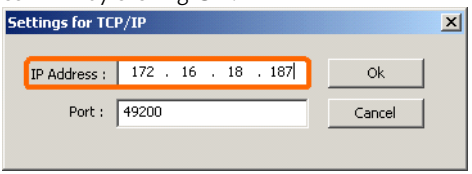


2 Check the IP address which is displayed in the acknowledge messge displayed after connecting via USB or RS-232 (see step a on page 21 and step b on page 22).



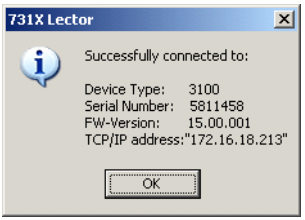
Use this IP address for the next steps.

3 Enter the IP address in the settings field for TCP/IP, and confirm by clicking **OK**.



4 Click the **OK** button in the Lector Connection pop-up menu.

5 Wait for the confirmation that the instrument has been found:



If the 3100 does not respond please check the connection to the instrument.

9 Continue with "Installing the manufacturer-specific test scripts and the coupling factor database" on page 26.

First steps

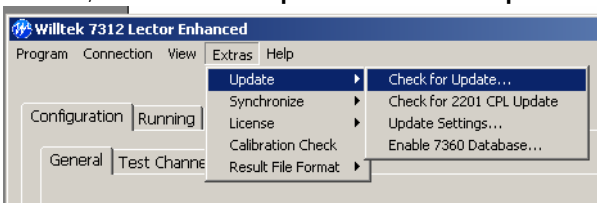
3

This chapter describes how to ensure that up-to-date manufacturer scripts and coupling values are being used, and how to start a first test. Topics discussed in this chapter are as follows:

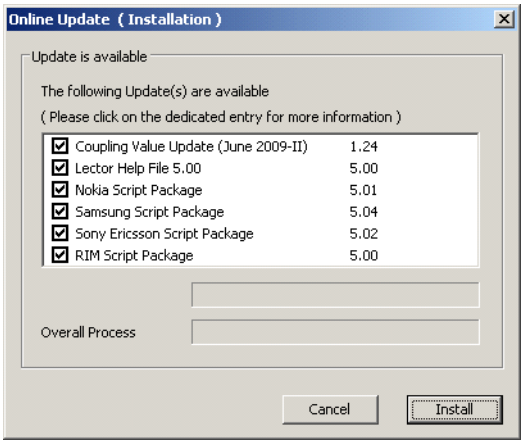
– "Installing the manufacturer-specific test scripts and the coupling factor database" on page 26
– "Setting up and starting a test" on page 28
– "Finding unused channels for testing" on page 30

Installing the manufacturer-specific test scripts and the coupling factor database

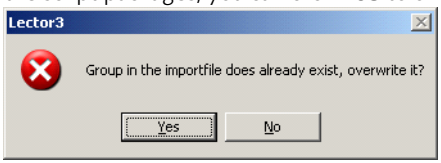
1 In Lector, select **Extras > Update > Check for Update**.



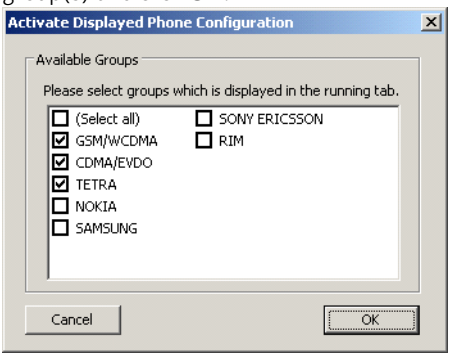
2 Follow the instructions, select all updates you need and click **Install**.



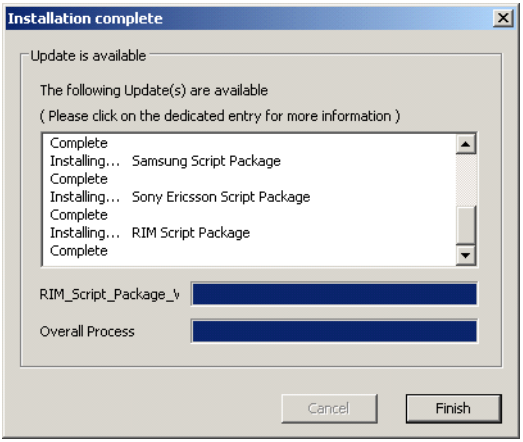
3 If the manufacturer script packages have been installed already, the following message appears. As long as you did not change the script packages, you can click **Yes** to overwrite the package.



4 To display the downloaded group, tick the required manufacturer group(s) and click **OK**.



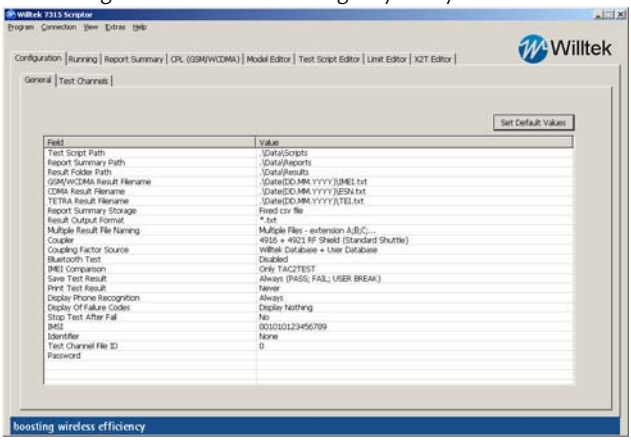
5 When the update has been finished, click **Finish**.
The latest manufacturer test scripts are now ready to be used.



6 Proceed with "Setting up and starting a test" on page 28.

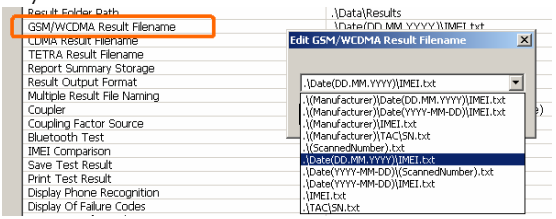
Setting up and starting a test

1 In Lector, go to the **Configuration** tab to set up the most important configuration items according to your system.

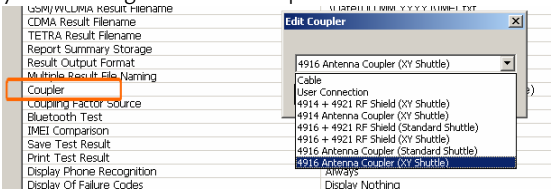


2 Check at least the following settings and change if necessary; open a selection box by double-clicking on the appropriate line. Each parameter is described in the help file under **Help > Help**.

a GSM/WCDMA Result Filename:
You can keep the default setting or change them according to your needs.



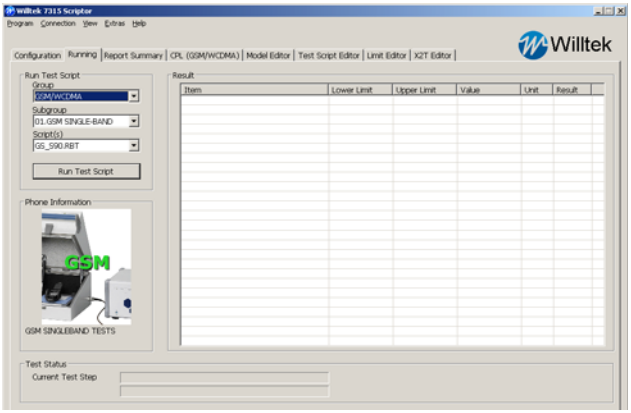
b Coupler
This setting is very important. Indicate which coupling type you are using to test mobile phones.



The coupling type can be identified using the following table:

	4916 + 4921 RF Shield (Standard Shuttle)	4916 + 4921 RF Shield (XY Shuttle)	4916 Antenna Coupler (Standard Shuttle)	4916 Antenna Coupler (XY Shuttle)
4921 RF Shield	✔	✔		
4916 Antenna Coupler	✔	✔	✔	✔
Standard Shuttle	✔		✔	
XY Shuttle		✔		✔

3 After the most important settings have been adjusted the test can be started. Therefore select the **Running** tab.



4 Select a Group, Subgroup and Test Script.
Example: In order to run a Nokia GSM Dual-band test for Level 1/2 service centers, the following items need to be selected:
Group: Nokia
Subgroup: Service Level 1/2
Scripts: G_D9018_L1-2.RBT

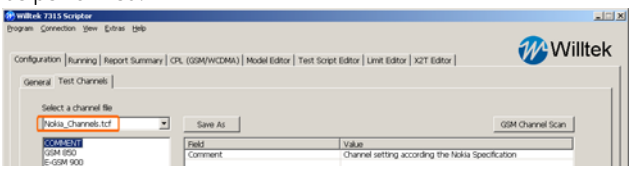
5 In order to start the selected test script, click the **Run Test Script** button.

Finding unused channels for testing

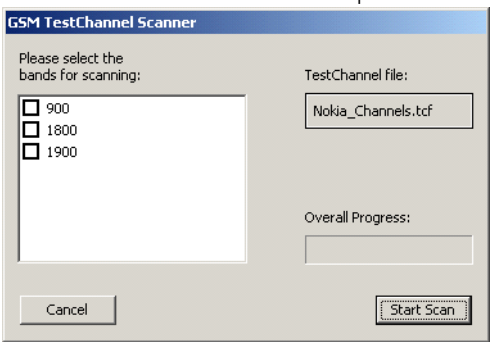
If you are using the 4916 Antenna Coupler without the 4921 RF Shield you may face interference problems because the selected radio channel may also be used by a real base station. You can use the Channel Scan function within Lector to scan for unused channels.

1 Click on the **Configuration > Test Channels** tab.

2 Select the channel file depending on the test scripts you are using. In the following example, the channel scan for Nokia will be performed.



3 Click **GSM Channel Scan** to call up the channel scanner.



4 Select the bands on which to perform the scan, and click the **Start Scan** button. Follow the user instructions.

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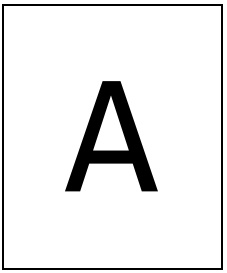

This appendix describes the conditions for using the Lector and Scriptor software.

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