



# RS-232 ComProbe II Quick Start Guide

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## MINIMUM SYSTEM REQUIREMENTS

- PC with Windows XP (Service Pack 2 or higher, 32-bit only), or Windows 7 (32-bit or 64-bit)
- Intel Core 2 Duo 2.2 GHz Processor or Higher
- RAM Requirements: 1GB minimum, 2GB recommended
- 50 MB free Hard Disk Space
- One USB 2.0 Port



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## INTRODUCTION

Welcome to Frontline's RS-232 ComProbe II Quick Start Guide.

To access the PDF version of this Quick Start Guide on your PC, click 'Start  $\rightarrow$  Programs  $\rightarrow$  Serialtest Async [version#]  $\rightarrow$  Documentation  $\rightarrow$  RS-232 ComProbe II QSG' or 'Start  $\rightarrow$  Programs  $\rightarrow$  NetDecoder [version#]  $\rightarrow$  Documentation  $\rightarrow$  RS-232 ComProbe II QSG'.

## INSTALLATION INSTRUCTIONS

There are two install procedures for the RS-232 ComProbe II: one for **XP** and one for **Windows 7**.

## **RS-232** ComProbe II Installation on XP

- 1. Insert the product CD into the PC.
- 2. Plug the RS-232 ComProbe II into a USB port.

The Found New Hardware Wizard dialogue box appears.

Found New Hardware Wizard				
	Welcome to the Found New Hardware Wizard Windows will search for current and updated foltware by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy Can Windows connect to Windows Update to search for software?			
	C Yes, this time only C Yes, now and every time I connect a device C No, not this time Click Next to continue.			
	<back next=""> Cancel</back>			

Figure 1 Install Wizard Welcome

- 3. Choose No, not this time
- 4. Click Next.



Found New Hardware Wigard	
	is wizard helps you install software for S-232 ComProbe II. If your hardware came with an installation CD or floppy disk, insert it now. at do you want the wizard to do? Install the software automatically (Recommended) Instal from a list or specific location (Advanced) k Next to continue.
	<back next=""> Cancel</back>

Figure 2 Found New Hardware Wizard Dialog

- 5. Choose Install from a list or specific location
- 6. Click Next.

Now you have to locate the RS-232 ComProbe II driver.

& Seat	h for the best driver in these locations.	
Use the paths of	e check boxes below to limit or expand the default search, which include and removable media. The best driver found will be installed.	s local
Г	Search removable media (Koppy, CD-ROM)	
	Include this location in the search	
	- Browse	1
	· · · · · · · · · · · · · · · · · · ·	22
<ul> <li>Don't</li> </ul>	search. I will choose the driver to install.	
Choose	e this option to select the device driver from a list. Windows does not gu	wanter
the de	we any choose will be the best match for your bardware.	

Figure 3- Browse

- 7. Select Don't search, I will choose the driver to install.
- 8. Click Next.





The next Found New Hardware Wizard dialog appears.

Sele	ct the device driver you want to install for this hardware.
0	Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
🗹 Shor	w <u>c</u> ompatible hardware
Mode	al contract of the second s
🔥 Th	is driver is not digitally signed! Have Disk
<u>Ie</u>	II me why driver signing is important
	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 4 - Directory Structure

9. Select Have Disk.

E,	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK
~		Cancel
	Copy manufacturer's files from:	

Figure 5 - Install From Disk

Now you have to locate the driver for your ComProbe.

10. Select Browse.

The driver is located on your product CD at: Serialtest\Drivers\Serial ComProbe or NetDecoder\Drivers\Serial ComProbe. This directory contains the Windows driver information file needed to install the driver.





Locate File					? 🛛
Look in:	Serial ComProbes	~	00	D	·
amd64 ≧i386 ∳Serial_Con	Probes.inf				
File name:	Serial_ComProbes.inf		*	C	Open
Files of type:	Setup Information (* in/)		Y	C	Cancel

Figure 6 - Locate File

- 11. Select the Serial\_ComProbes.inf.
- 12. Click Open.



Figure 7 - Install From Disk

Back at the previous dialog the location of the directory you just chose appears in the text box next to the Browse button.

13. Select *OK* to continue the installation.



Found New Hardware Wizard				
Select the device driver you want to install for this hardware.				
Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.				
Modal				
Frontline RS-232 ComProbe II				
This driver is not digitally signed!     Have Disk      Have Disk				
< Back Next > Cancel				

Figure 8 - Select ComProbe

The name of the RS-232 ComProbe II will be displayed under Model.

#### Note: If there are other devices listed, you have to select the RS-232 ComProbe II.

14. Click the *Next* button to continue the installation.

#### Note: If you get a dialog box questioning the software integrity, don't worry—Click *Continue Anyway*.

Your computer will now install the RS-232 ComProbe II driver from the directory you selected; you'll get a dialog box saying that the installation is finished.





Figure 9 - Finished Installation

15. Click the *Finish* button to close the wizard.

The installation of the RS-232 ComProbe II driver is now complete.

Your computer will remember this USB application. The next time you insert the RS-232 ComProbe II, it will automatically find the appropriate interface driver.

## RS-232 ComProbe II Installation on Windows 7

The procedure for installing the RS-232 ComProbe II driver is different on Windows 7 than it is for XP. Follow the steps below.

- 1. Insert the *product CD* into the PC.
- 2. Plug the *ComProbe into a USB* port.

Note: Depending on how your PC is set up, you will either see a message indicating that the driver software was not installed, or that it was installed successfully. Whatever the case:

- 3. Close the dialog.
- 4. Go to the Control Panel and open the *Device Manager*.





Device Manager	
File Action View Help	
⊿ ⊴ rand#4	
Batteries	
Computer	
Tigk drives	
Display adapters	
DVD/CD-ROM drives	
▲ ● Frontline Test Equipment ComProbes	
Frontine RS-232 ComProbe II	
DE ATA/ATAPI controllers	
IEEE 1394 Bus hast controllers	
Imaging devices	
Keyboardi	
> A Mice and other pointing devices	
Monitors	
> 🔮 Network adapters	
> M Portable Devices	
Processors	
SD host adapters	
Sound, video and game controllers	
System devices	
Universal Serial Bus controllers	

Figure 10 - Device Manager

5. Right click on *RS-232 ComProbe II* under Frontline Test Equipment ComProbes and select *Update Driver Software.* 

mProbes Update Driver Software Disable Uninstall Scan for hardware changes Properties	
	mProbes Update Driver Software Disable Uninstall Scan for hardware changes Properties

Figure 11 - Update Driver Software





The next step is to choose the driver location.



Figure 12 - Browse my computer...

6. Select Browse my computer for driver software.



Figure 13- Let me pick...

7. On this dialog, select Let me pick from a list of device drivers on my computer.



Select the manufacturer and model of your hardware disk that contains the driver you want to install click	device and then click Next. If you have Have Disk
Unix unix contains the driver you want to install, click	CHARTE PLANE
Model	
Frontline Rivetooth ComProhe	
Frontline Bluetooth ComProbe in DFU mode	
Frontline RS-232 ComProbe II	
Frontline RS-232/422/485 ComProbe	
Frontline RS-232/422/485 ComProbe	
Frontline RS-232/422/485 ComProbe Frontline RS-232/422/485 ComProbe Total Composition Company This driver is not digitally signed!	Have Disk

Figure 14 - Have Disk

8. Select Have Disk.



Figure 15 - Install From Disk

9. On the Install From Disk dialog select Browse.

Now you have to drill down to find the folder that contains the driver. The driver is located on your product CD at: **Serialtest\Drivers\Serial ComProbe or NetDecoder\Drivers\Serial ComProbe**. This directory contains the Windows driver information file needed to install the driver.

10. Open the Serial ComProbes folder



Look in: 🌖	Serial ComProbes	- 🗿 🧊 🖻	<b>.</b>		
Name	*	Date modifie	d Type		Size
Files Curre	ntly on the Disc (3)				
📕 amd64		8/4/2010 11:0	8 AM File f	older	
)), i386		8/4/2010 11:0	8 AM File f	older	
Serial_C	omProbes	4/30/2009 9:2	28 AM Setup	o Information	
< [		m			
∢ île name:	Serial_ComProbes.inf	III:		▼ Oper	n

Figure 16 - Serial ComProbe Folder

- 11. Click on the Serial\_ComProbes file
- 12. Select Open.



Figure 17 - Install From Disk

13. On the Install From Disk dialog select OK.



	rdware.
Select the manufacturer and model of your hardware device disk that contains the driver you want to install, click Have D	and then click Next. If you have isk.
Model	
Frontline RS-232 ComProbe II	

Figure 18 - Select Model

14. Select Frontline RS-232ComProbe II under Model.

Note: If Frontline RS-232 is the only device listed, you do not have to select a model. If other devices are listed, you must select the model before selecting Next.

15. Then select Next.

Once the driver starts to load,

r software			
		-	
	r software	r software_	r software_

Figure 19 - Software Loading - Win7



you may get a Windows Security warning.



Figure 20- Windows Security Warning

16. You can ignore this warning by selecting *Install this driver software anyway*.

Your computer will now install the ComProbe driver from the directory you selected; you will get a dialog box saying that the installation is finished.



Figure 21 - Installation Complete

17. Click the *Close* button to close the wizard.





## Software Installation

The installation of your NetDecoder or Serialtest Async product creates a folder on your desktop.

- 1. Open the desktop folder and double-click the shortcut labeled *Frontline NetDecoder* or *Frontline Serialtest Async*.
- 2. The software displays the *Choose Protocol to Analyze* dialog that contains a list of the available protocols.
- 3. Expand the folder containing the desired protocol and select the protocol stack.
- 4. Select a capture method from the *Data Capture Method* selection pane below the list window (if necessary).
- 5. Check the *Create Shortcut When Run* checkbox if you like and click the *Run* button (if you choose to create a shortcut, the system creates one and places it in the desktop folder).

Alternatively, you can access the *Choose Protocol to Analyze* dialog from your Windows operating system by clicking *Start | Programs |NetDecoder* [version#] |*Frontline NetDecoder*. Then select the protocol from the displayed list. Consult the online Help for additional information on choosing protocols.

## **RS-232 COMPROBE II DATA CAPTURE CABLES**

The RS-232 ComProbe II ships along with these items:

- 1. RS-232 ComProbe II
- 2. 6-foot USB Cable
- 3. RS-232 Y-Cable (one female 9-Pin to two male 9-Pin connectors)
- 4. 6-foot RS-232 Extension Cable
- 5. One male 25-Pin to female 9-Pin adapter
- 6. One female 25-Pin to male 9-Pin adapter

The RS-232 ComProbe II connects to the analysis PC via USB. Use your 6-foot USB cable to connect the RS-232 ComProbe II to your PC. The RS-232 ComProbe II can be connected directly in-line with your regular communication setup. You may also use the RS-232 Y-Cable, the extension cables and the 25-Pin to 9-Pin adapters depending upon your communication setup.

### **MONITORING OPTIONS**

Monitoring serial communications by Frontline's Serialtest or NetDecoder analyzer is passive. Some serial analyzers receive the data from one side of the circuit under test and retransmit it to the other side. The Serialtest and NetDecoder analyzers <u>do not</u> work that way. The RS-232 ComProbe II taps the circuit under test using a simple "Y" cable and there are no active electronics inserted into the communication path.

To assist customers in tapping into Async RS-232 bus configurations, Frontline is providing customers with a lot of flexibility to address different monitoring situations. The RS-232 ComProbe II can be used





directly in-line, or connected via a combination of a provided Y-cable and/or the 6 foot RS-232 extension cable. Some monitoring situations may require a pair of 25-pin to 9-pin adapters, which are included.

The monitoring connection options are displayed below.



Figure 22 – Monitoring Connection Option 1: RS-232 ComProbe II Only



Figure 23 – Monitoring Connection Option 2: RS-232 ComProbe II with Y-Cable



Figure 24 – Monitoring Connection Option 3: RS-232 ComProbe II with Y-Cable and Extension



## HARDWARE SETTINGS

The Hardware Settings dialog is used to select a device to sniff/scan. The first time you run the program, the Hardware Settings window appears. You can change any of the hardware settings, at anytime, by choosing *Options* | *Hardware Settings* from the Control window.

1. Select *Hardware Settings* from the Options menu on the Control window.

e Setting	3		
RS-422/48	5 ComProbe	. <b>.</b> .	Refresh List
ОК	Cancel	Help	
	e Setting R5-422/48 OK	e Settings RS-422/485 ComProbe OK Cancel	RS-422/485 ComProbe

Figure 25 - Hardware Settings

- 2. Select *a device* from the drop-down list.
- 3. Select OK.

If no devices are found, the list will be blank. You can also select **Refresh List** to make sure the list is complete.

## **I/O SETTINGS**

Before you can begin capturing data, you must set the data rate and several other variables. You provide this information in the I/O Settings window.

I/O Settings		×		
File				
	DTE/DCE			
Data Rate (bps):	230400	~		
Parity:	None	~		
Data Bits:	7	~		
Stop Bits:	2	~		
Disable Control	Signal Inte	errupts		
Bit Order: LSB fi	rst (normal)			
Monitor: Both (DTE & DCE) 🛛 👻				
ОК	Car	ncel		

Figure 26 - I/O Settings



- the Options menu.
- 1. Click on the I/O Settings icon <sup>10</sup>/<sub>10</sub> on the Control window toolbar, or choose I/O Settings from
- 2. For the Data Rate (bps), select a rate from 300 to 921,600 or enter a unique data rate up to 954,861.

Data Rates supported by the RS-232 ComProbe II include:

<i>300</i> - 220000
220353 - 238715
240385 - 260416
264424 - 286458
293804 - 318287
330529 - 358072
377748 - 409226
440706 - 477430
528847 - 572916
661058 - 716145
881411 - 954861

- 3. For **Parity**, select *None*, *Odd*, *Even*, *Mark* or *Space*. **None** is the default.
- 4. For Data Bits (size of the bits), select 5, 6, 7, or 8. Eight is the default.
- 5. For **Stop Bits** (end point of the bit) select 1, 1.5, or 2. **One** is the default
- 6. If you want to disable the **Control Signal Interrupts**, select the checkbox.
- 7. For Bit Order, select LSB (Least Significant Bit) or MSB (Most Significant Bit).
- 8. For **Monitor**, select Capture DTE, Capture DCE, or Both (DCE & DTE)
- 9. Click the **OK** button on the I/O Settings window top close the dialog.





## **TECHNICAL SUPPORT**

Technical support is available in several ways. The online help system provides answers to many user related questions. Frontline's website has documentation on common problems, as well as software upgrades and utilities to use with our products.

Web: <u>http://www.fte.com</u> click **Support** 

Email: <u>tech\_support@fte.com</u>

If you need to talk to a technical support representative, support is available between 9am and 5pm, U.S. Eastern time, Monday through Friday. Technical support is not available on U.S. national holidays.

Phone: +1 (434) 984-4500

Fax: +1 (434) 984-4505