

WedgeLink™

Lite • Standard • Network

User's Guide



PO Box 3249 • Sunriver, OR 97707-0249
541.593.1656 • FAX 541.593.5652
sales@microridge.com • www.microridge.com

"The Interface Solutions Company™"

WedgeLink

Software Keyboard Wedge

User's Guide

*Transfer RS232 and TCP/IP Data
Directly into Windows Applications*

*MicroRidge Systems, Inc.
Sunriver, Oregon*

*Copyright © 1997-2001
All Rights Reserved.*

Revised 2-27-01, Printed 10-13-01

TABLE OF CONTENTS

QUICK START	1
INTRODUCTION	3
WedgeLink Editions	3
WedgeLink Lite	3
WedgeLink Standard.....	3
WedgeLink Network.....	3
User's Guide Organization	3
Program overview.....	4
System requirements	4
Programs Limits	5
Evaluation program.....	5
INSTALLATION.....	6
Program installation.....	6
SETUP	7
Send commands dialog.....	7
Description.....	8
Command	8
Number of cycles	8
Cycle interval.....	8
When to send	8
Preferences dialog.....	9
Date & time formats.....	9
Date format.....	9
Time format.....	9
Restore at file open	9
Data parsing	10
Parsing description (Label Tab).....	10
Parsing functions (Parse Tab).....	10
Find first numeric field	11
Parsing end-of-packet (Packet Tab).....	11
End-of-packet character	12
End-of-packet time	12
Parsing match string (Match Tab).....	12
Parsing prefix (Prefix Tab)	12
Parsing mask (Mask Tab)	13
Limits	13
Toolbar	13
Sort row	14
Delete row	14
Replace, insert before & insert after strings	15
Parsing character removal (Remove Tab).....	15
When to remove the characters	15
Parsing character replacement strings (Replace Tab).....	15
Parsing suffix (Suffix Tab)	15
Parsing test (Test Tab)	16
Serial port.....	16
9-Pin serial port connector	16
25-Pin serial port connector	16

Serial port & communications parameters (Serial Port Tab).....	17
Enable All checkbox	17
Serial port handshake (Handshake Tab)	17
Hardware handshake	17
Software (XON/XOFF) handshake	17
None (no handshake).....	17
Serial port buffers (Buffers Tab).....	17
Receive data (RxD)	17
Transmit data (TxD).....	18
Communications test end-of-packet (Packet Tab).....	18
Network overview.....	18
Input/Output packets to monitor	18
Input source	18
Show input/output for last output packet.....	18
Network setup dialog	18
TARGET FILE & APPLICATION	20
Selecting target file.....	20
Selecting target application.....	21
Get target application	21
Available applications	21
Target application	21
Example.....	22
Hidden applications.....	22
TESTING	23
Technical support.....	23
RS232 Communications Test Program.....	23
Status	24
Character listbox	24
Printing.....	24
Testing data parsing	24
Parsing target application or disk file	25
Parsing test with simulated serial port input.....	25
Parsing test with actual serial port input.....	26
Network Communications Test Program.....	27
DATA COLLECTION	28
Toolbar.....	29
Status controls.....	30
Status indicators (Lite & Standard Editions)	30
Status indicators (Network Edition).....	31
RxD Buffer Status (Network Edition Only)	31
TROUBLRSHOOTING TIPS	32
Serial communications	32
Network communications	33
Testing with ComTest_Network.....	33
Data parsing	34
Sending data to an application.....	34
SUPPORT	35
Contact Information.....	35
Technical support.....	35
Main office.....	35

Web site.....	35
Technical support.....	35
INDEX	37

QUICK START

Want to quickly get started using *WedgeLink*? The steps shown below should get you moving in the proper direction. Be sure to refer to the User's Guide and the items in the help system. Context sensitive help is available throughout the program and is accessible by pressing the F1 key or by clicking on the question mark located in the upper right-hand corner of the active window.

This Quick Start procedure deals with serial communications and data parsing. If you are using *WedgeLink Lite*, skip the steps that reference data parsing. If you are using *WedgeLink Network*, refer to Troubleshooting Tips on page 33 for suggestions on testing network communications.

In order to use *WedgeLink* to collect data from the serial port and send this data to an application or file, you need to determine the following:

- What serial port is your device connected to?
- What baud rate and communications parameters does your serial device need?
- What Windows application or file do you want to send the data to?
- What format do you need for the data that is being sent to the application or written to the file?

The general steps you should follow in setting up a *WedgeLink* configuration are given below. Depending upon your knowledge of your serial device and the amount of data parsing that must be performed, you may be able to skip some of these steps.

- Use the *Communications Test* dialog to verify serial port, communications parameters and determine format of data output from your serial device. This dialog is available from the *Test/Serial Port* menu.
- Set up the serial port from the *Setup/Input Serial Port* menu item.
- Set up the data parsing, if needed, from the *Setup/Parsing* menu item (*WedgeLink Standard & Network Editions*).
- Test the data parsing with the data parsing test dialog. This dialog is part of the *Parsing Setup & Test* dialog and is available from the *Test* tab and the *Test/Parsing* menu item (*WedgeLink Standard & Network Editions*).
- Select the target application or file. You can bring up the appropriate dialog by double clicking the *Target application* or *Target file* read-only edit controls on the main *WedgeLink* screen. These dialogs can also be accessed from the *Target* menu item.
- If you are sending data to a Windows application, you need to manually start the application. You should then set the input focus to the first location that will receive data from *WedgeLink*.
- Enable the serial port, target application (or file) and send data from your serial device.

- Document the purpose of the current configuration in the *Label* tab of the *Parsing Setup & Test* dialog. The documentation tab can also be accessed from the *Setup/Description* menu item (*WedgeLink Standard & Network Editions*).
- Save the *WedgeLink* configuration for later use by pressing the save button on the toolbar or selecting the *File/Save* menu item.

INTRODUCTION

WEDGELINK EDITIONS

WedgeLink is available in 3 different editions. Each edition was designed to meet a specific set of user requirements.

- *WedgeLink Lite*.
- *WedgeLink Standard*.
- *WedgeLink Network*.

The differences between the 3 editions of *WedgeLink* can best be summarized by comparing the input sources, data parsing and output targets.

WedgeLink Lite

WedgeLink Lite is a subset of *WedgeLink Standard*. The Lite Edition is intended for users that do not need to perform any data parsing on the input packets.

- Input Sources: RS232 serial port (COM1 to COM20).
- Data Parsing: None.
- Output Targets: Windows application and disk file.

WedgeLink Standard (The original WedgeLink)

WedgeLink Standard represents the original configuration of *WedgeLink* that was released in June 1998. Since the original 1998 release, there have been numerous enhancements to this product.

- Input Sources: RS232 serial port (COM1 to COM20).
- Data Parsing: Extensive parsing capabilities.
- Output Targets: Windows application and disk file.

WedgeLink Network

WedgeLink Network includes all the features of *WedgeLink Standard* and adds network communications.

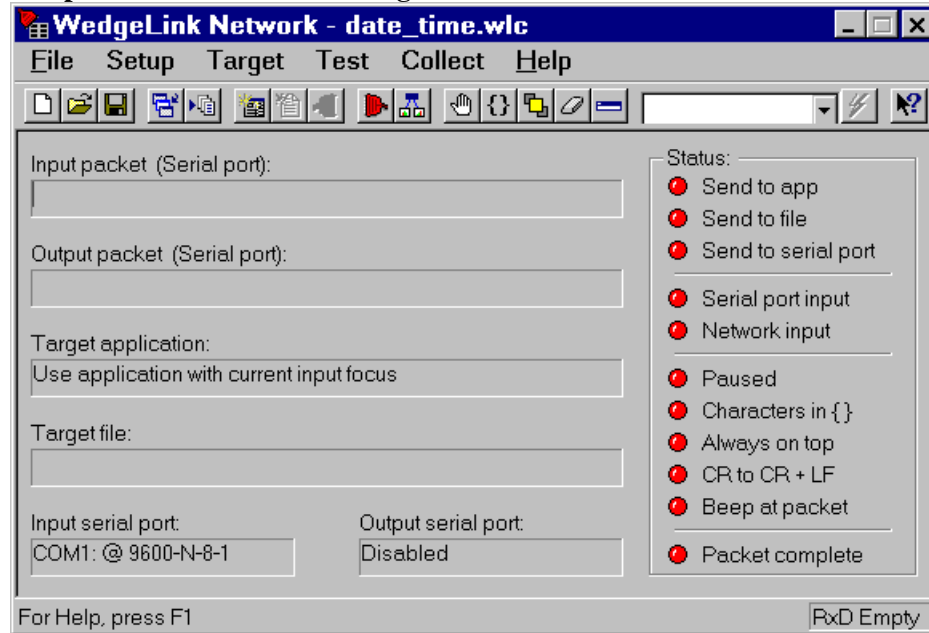
- Input Sources: RS232 serial port (COM1 to COM20) and TCP/IP network (up to 10 simultaneous connections).
- Data Parsing: Extensive parsing capabilities.
- Output Targets: Windows application, disk file and RS232 serial port.

USER'S GUIDE ORGANIZATION

This user's guide covers all 3 *WedgeLink* editions. If a section or item only refers to a particular edition it will be noted.

PROGRAM OVERVIEW

Sample Main Screen from WedgeLink Network



WedgeLink is a software keyboard wedge program that allows you to do the following:

- Transfer information from the serial port to applications such as Microsoft Excel.
- Transfer information from a TCP/IP network connection to applications such as Microsoft Excel (*Network Edition Only*).
- Use with any 32-bit Windows application that accepts keyboard input.
- Make your application think that the information coming from the serial port is actually being entered through the keyboard.
- Parse the serial port data so that only the information that you need gets sent to your application (*Standard & Network Only*).
- Send the serial port data to a disk file in addition to an application.
- Send the parsed data out a serial port (*Network Edition Only*).

In many cases, the only setup you will have to do is select your target application and configure the serial port. It will be necessary for you to refer to the documentation for your serial device so that you can select the baud rate and communications for the serial port.

If you would like additional functionality added to *WedgeLink*, please let us know your requirements. Refer to “Contact Information” for phone numbers and web address (see page 35).

System Requirements

The system requirements for *WedgeLink* are as follows:

- 3 MB of free disk space
- 1 or more available serial ports
- Windows 95, Windows 98 or Windows NT 4.0
- Approximately 12K of disk space for each configuration file

WedgeLink is a 32-bit application and will not run on Windows 3.1x.

Program Limits

The following limits have been used in the development of *WedgeLink*. If you find that you need larger limits, please let us know. Refer to “Contact Information” for phone numbers and web address.

- Maximum length of the prefix string = 15 characters
- Maximum length of the suffix string = 15 characters
- Maximum length of the match string = 15 characters
- Maximum length of insert string for parsing mask = 15 characters
- Maximum number of insert strings for parsing mask = 25
- Maximum length of the mask string = 300 characters
- Maximum number of replacement strings = 3
- Maximum length of a replacement string = 15 characters
- Maximum length of the user supplied description = 500 characters

EVALUATION PROGRAM

If this is an evaluation copy of *WedgeLink*, you will have a limited time period to use the program to see if it meets your requirements. All of the features contained in the single machine license version of *WedgeLink* are also contained in the evaluation version. The evaluation version of *WedgeLink* is clearly identified when the program is started and in the About box

The evaluation period starts when the program is first run. You cannot extend the evaluation period by uninstalling and then reinstalling *WedgeLink*. If you decide you want to upgrade to a single machine license, refer to “Contact Information” for phone numbers and web address (see page 35).

There is a color copy of this manual contained on the installation disks. This manual is in the Adobe Acrobat format and has the filename *WedgeLink.pdf*.

INSTALLATION

WedgeLink is a 32-bit application and requires Windows 95 or later, or Windows NT 4.0 or later. *WedgeLink* cannot be installed on Windows 3.1x or NT 3.51. The complete installation will require less than 3MB of disk space.

PROGRAM INSTALLATION

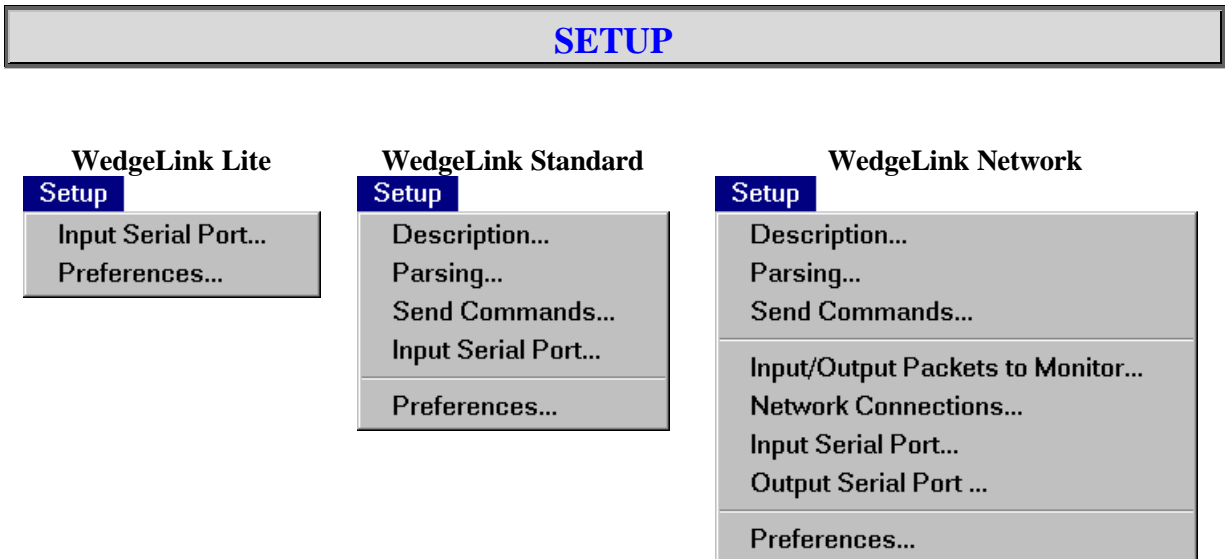
To install *WedgeLink*, run the program SETUP.EXE and follow the instructions on the screen. For the initial installation of *WedgeLink Lite & Standard*, the setup program will perform the following steps if the user selects the default options.

- The *WedgeLink* program will be installed in C:\WedgeLink
- The sample configuration files will be installed in C:\WedgeLink\Config
- A copy of this manual in Adobe Acrobat format (WedgeLink.pdf) will be placed in C:\WedgeLink
- A *WedgeLink* program group will be added to the Programs Start menu. For Windows 2000 and NT 4.0, the program group will be added to the personal section.

The default installation of *WedgeLink Network* uses the following parameters.

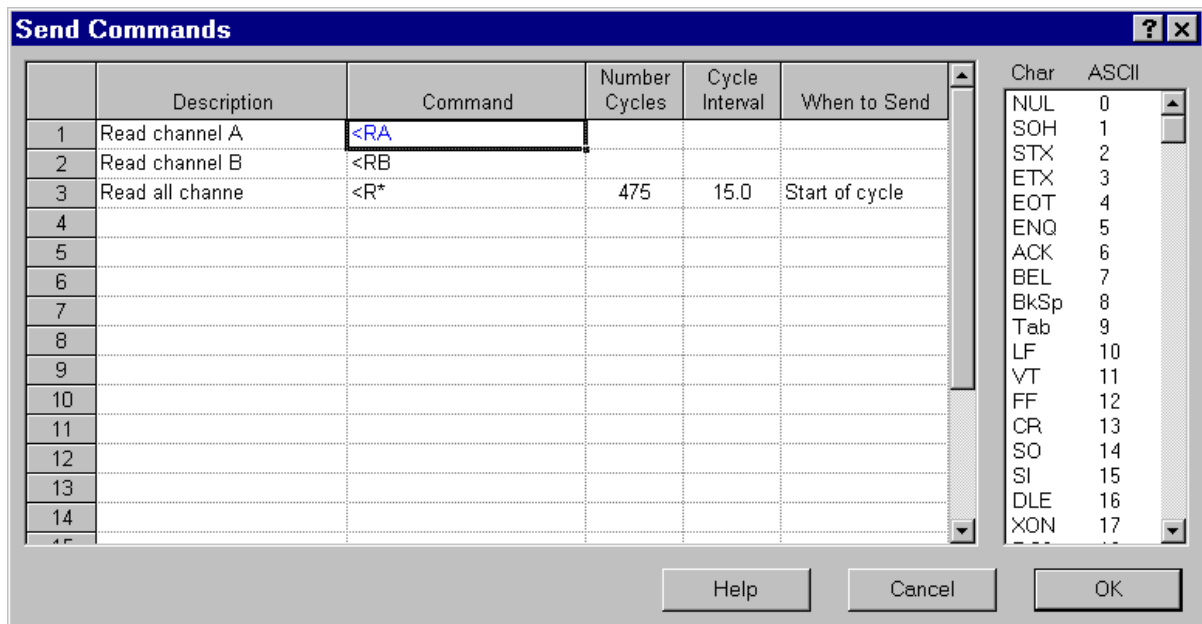
- The *WedgeLink Network* program will be installed in C:\WedgeLink_Network
- The sample configuration files will be installed in C:\WedgeLink_Network\Config
- A copy of this manual in Adobe Acrobat format (WedgeLink.pdf) will be placed in C:\WedgeLink_Network
- A *WedgeLink Network* program group will be added to the Programs Start menu. For Windows 2000 and NT 4.0, the program group will be added to the personal section.

When *WedgeLink* is installed, it gets installed in the Evaluation mode. To convert the Evaluation mode to a Single Machine License select the “*WedgeLink Registration*” button on the initial startup dialog and enter your Registration ID. If you have purchased a Single Machine License copy, this Registration ID was included with the materials sent you or it was e-mailed directly to you. If you have downloaded an evaluation copy from the web site you can purchase a Registration ID by contacting us or going to www.microridge.com and purchasing *WedgeLink* online. Refer to “Contact Information” for phone numbers and web address (see page 35).



The setup required for *WedgeLink* is performed from the Setup menu. In many cases, the only setup required will be to select the proper serial port, baud rate and communications parameters. After completing your setup you can save the configuration to a file for later use. If you are using multiple configurations, it is recommended that you make use of the parsing description to help document the purpose and operation of a particular configuration.

SEND COMMANDS DIALOG (*Standard & Network Only*)



This dialog box allows you to set up commands to be sent to the device connected to your serial port. The descriptions for the commands that have been entered are shown in the dropdown listbox on the toolbar. To send a command, press the hotkey Ctrl+Z or press the

button to the right of the command description. Commands can only be sent if the serial port is enabled. To stop a command cycle press Ctrl+Z (WedgeLink must have the input focus) or click the button to the right of the command description.

Description

Description of the command to be sent. Maximum length is 15 characters.

Command

Command to be sent. Each command can be up to 15 characters in length. Commands within { } such as {Esc} or {CR}, use a single character position. If you enter an invalid command string, the string will be shown in **red** when you leave the cell. All invalid command strings must be corrected before the commands can be saved. To transfer a command from the listbox to the command column, doubleclick the desired character in the listbox.

Number Cycles

A command can be repeated continuously or a sent a specified number of times. In order for this value to be used the "Cycle Interval" field must also be defined. If this field is blank and the "Cycle Interval" field is defined, the command will be repeated continuously. The maximum value for this field is 60,000.

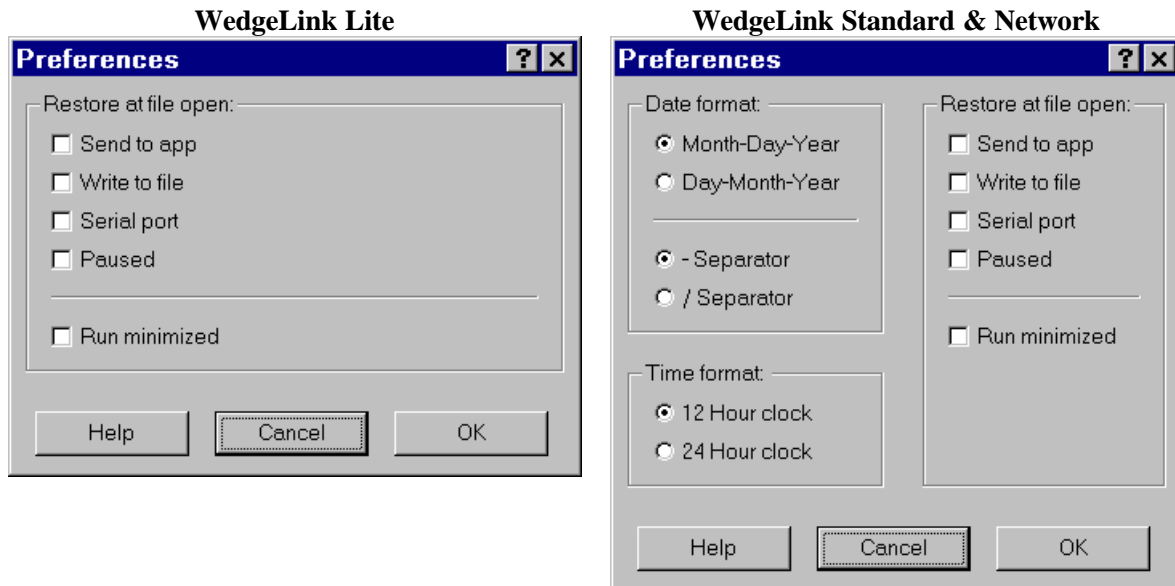
Cycle Interval

The interval between each command cycle. This value can range from 0.5 seconds to 86,400 seconds. A single day is equal to 86,400 seconds.

When to Send

Should the command be sent at the beginning or the end of the cycle? This field may not have much meaning for a cycle time of 1 second, but it becomes more important as the cycle time becomes longer. To set "Start of cycle" press S and to set "End of cycle" press E on the keyboard

PREFERENCES DIALOG



Date & Time Formats (*Standard & Network Only*)

The preferences dialog allows you to set the format for the date and the time. You can also specify the separator character for the date. The date and time are displayed on the top of printed reports and can be added to the output packets through the parsing setup.

Date Format

The date format can be Month-Day-Year (5-14-1998) or Day-Month-Year (14-5-1998). A date separator of dash (-) or slash (/) can also be specified. If your computer properly handles the year 2000 dates, *WedgeLink* will also properly handle these dates.

Time Format

The time can be specified in a 12 (2:48:14 PM) or 24 (14:48:14) hour format.

Restore at File Open

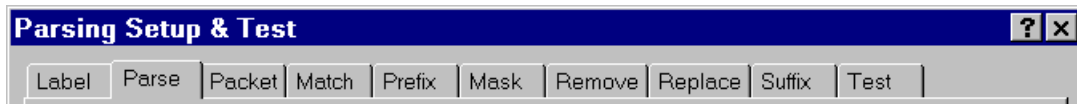
The state of most functions (Characters in { }, Always on top, etc.) are set to the values defined in the .WLC configuration file. However, there are 4 functions that the user may not want to set to their previous state. These functions are as follows:

- Send to app
- Write to file
- Serial port
- Paused

If any of the above 4 items are checked, they will be restored to the state that existed when the configuration file was last saved. Any items not checked will be set to the off (☐, red indicator) state.

You can also have *WedgeLink* minimize itself to an icon after a configuration file is opened. To automatically minimize *WedgeLink*, check the run minimized option. Be sure to save your configuration file after selecting this option.

DATA PARSING (*Standard & Network Only*)

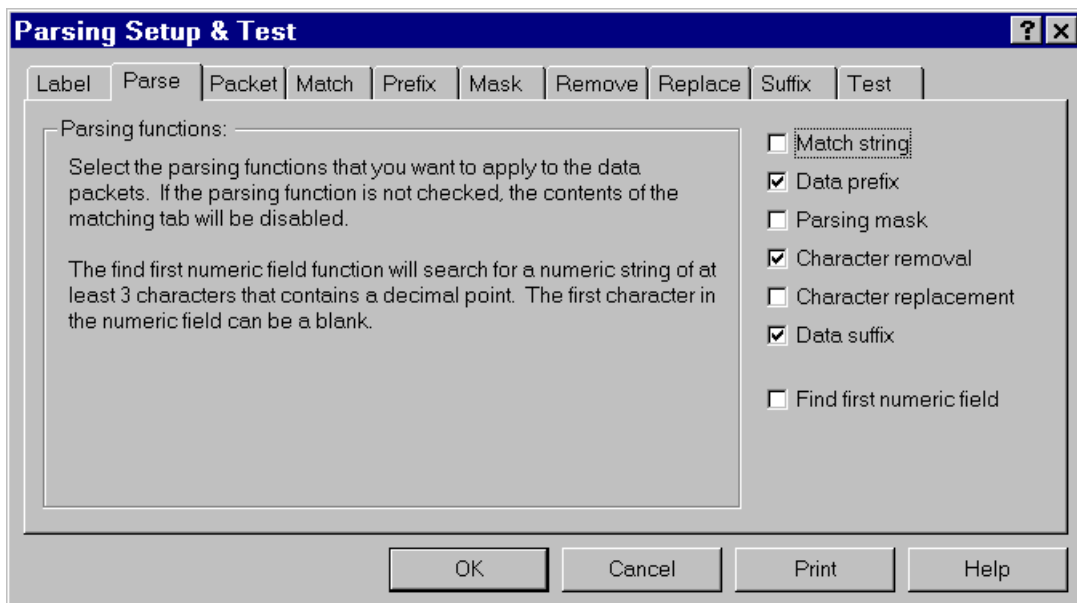


The parsing setup is accessed from several tabs in a tabbed dialog box and allows you to remove unwanted characters or add characters to the serial port string. In many cases you will not have to do any parsing. An example of removing unwanted characters would be removal of all blanks in the string. If you are transferring the string to a spreadsheet, you may want to add tab and/or cursor keystrokes to the string. Once you have set up your parsing, you can use the Test tab in the parsing dialog to test and fine tune your parsing scheme. Several sample parsing setups have been included with the program.

Parsing Description (Label Tab)

The Label Tab allows you to document the current *WedgeLink* configuration. If you are using multiple configurations or have implemented complex parsing schemes, it is recommended that you document the purpose and operation of the configuration. The maximum number of characters that can be used in a description is 500.

Parsing Functions (Parse Tab)



The Parse Tab controls which parsing functions are enabled. If a parsing function is not checked, that function will not be used on the serial port data. If a parsing function is disabled, you will not be able to modify any of the parsing features for that particular

function. Be sure that you have enabled the parsing functions that you want to use. The parsing functions that are available are:

- Match string
- Data prefix
- Parsing mask
- Character removal
- Character replacement
- Data suffix
- Find first numeric field

Find First Numeric Field

The Find first numeric field function will search for a numeric string of at least 3 characters that contains a decimal point. The first character in the numeric field can be a blank.

Examples:

Input string = 01MUX 1.3485INCH

Output string = 1.3485

Input string = A, 8-6-1998, 12:23:51, 165.3 grams

Output string = 165.3

The other parsing functions such as parsing mask, character removal, etc. can be used in conjunction with the “Find first numeric field” function. The process that WedgeLink follows when the “Find first numeric field” function is active is outlined below.

- A string is constructed from the input data and it is parsed as though this string was going to be transferred to an application. The prefix and suffix strings are not included as part of this initial string.
- If the resulting string contains at least 3 characters, WedgeLink searches for the first numeric field. If the string is less than 3 characters, the string is discarded and nothing is sent to the application or file.
- If a numeric field is found and the prefix function is active, the prefix is added to the beginning of the numeric field string. If no numeric field is found, the string is discarded and nothing is sent to the application or file.
- If the suffix function is active, the suffix is added to the end of the numeric field string
- If the suffix function is not active, a carriage return (ASCII 13) is added to the end of the string. If the CR to CR + LF option is active on the main window, a LF (ASCII 10) will also be added to the string. To eliminate the CR or CR/LF, set the suffix function to active and leave the suffix string blank.
- The resulting string is sent to the application or file.

Parsing End-of-Packet (Packet Tab)

WedgeLink collects information from the serial port (or Network channel) does not process it until the end of the data packet is encountered. The end-of-packet identifier can be a specific character or a time gap.

End-of-Packet Character

For most serial devices, the end-of-packet character will be a carriage return (CR or ASCII 13). In some cases the serial device will end its output packet with a carriage return and linefeed combination (CR/LR). In this case, you should select the LF (ASCII 10) character as the end-of-packet character.

End-of-Packet Time

If your serial device does place a specific character at the end of the packet, you must use a time gap to detect a packet. When using the end-of-packet time, *WedgeLink* waits for a period of time when no data is received from the serial port. Once this gap time period exceeds the end-of-packet time, *WedgeLink* will consider the information received as a packet and process it per the parsing setup.

The maximum number of characters in a packet must also be specified. If *WedgeLink* receives more characters than are allowed in a packet, the characters are discarded and *WedgeLink* saves the next character as the first character in the packet. Normally this value can be set to the default value of 100.

Parsing Match String (Match Tab)

If your serial device outputs multiple lines of information for every measurement that it takes, you may only want to select the information contained in one of those lines. You can select an individual line, if that line always contains a unique string or label.

Example:

Assume that your serial device outputs the following strings for a set of measurements. In this example, the numbers in the first 6 columns can change; however, the labels in the rest of the columns are always the same.

```
238 , inch , num , A
1 . 1755 , inch , min , A
1 . 1817 , inch , max , A
. 0062 , inch , TIR , A
```

If you only wanted to process the line that contained the string TIR, you would set the match string to TIR. The other 3 lines in this example would be discarded and not passed to the application or written to the file.

Parsing Prefix (Prefix Tab)

The parsing prefix allows you to add a string to the beginning of the string that will be sent to an application or written to a file.

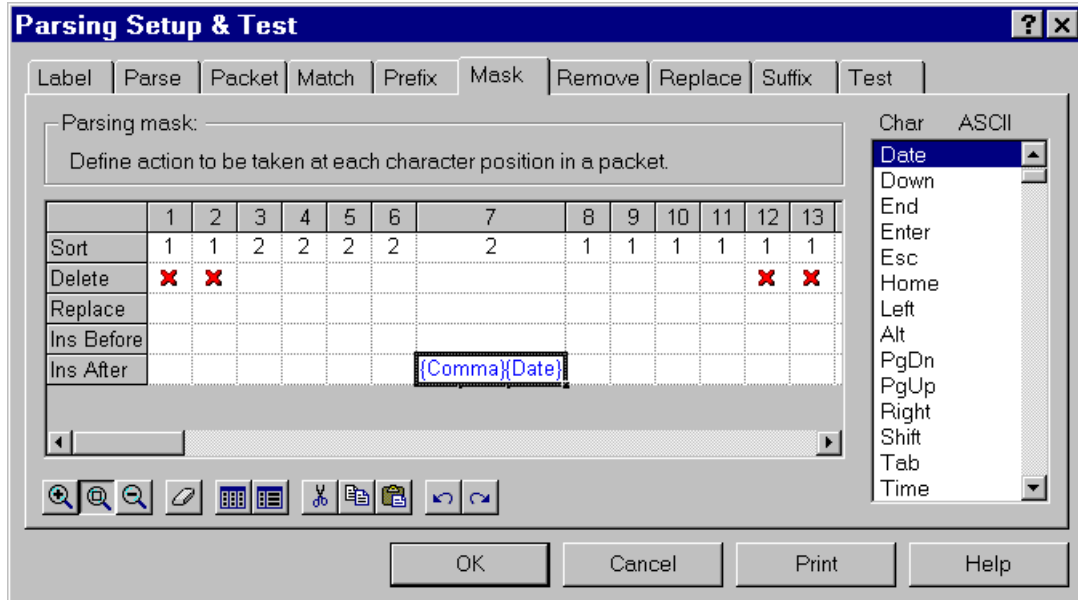
Example

If you are sending your data to Microsoft Excel and you want to precede the data with the current date and time you could use the following prefix string.

```
{Date} {Tab} {Time} {Tab}
```

This prefix will put the current time in the first cell and the time in the next cell to the right. The tab character moves the input cell 1 position to the right.

Parsing Mask (Mask Tab)



The parsing mask allows you to define a set of actions to be taken at each character position. The parsing mask is limited to 300 characters. It is unlikely that you will run into data packets from the serial port that exceeds this 300-character limit. The functions that can be performed at each character position are as follows:

- Sort or move the character
- Delete the character
- Replace the character with a string
- Insert a string before the character
- Insert a string after the character

The grid will not respond to the mouse or user input if the *Parsing mask* has not been selected on the Parse Tab. The listbox is only active if the input cell is on the Replace, Insert Before or Insert After rows.

Limits












There are limits that you should be aware of before starting to set up the parsing mask.

- Maximum number of character positions in the mask = 300
- Sort codes = 1 to 9
- Total number of strings that can be used (Replace + Insert Before + Insert After) = 25
- Maximum length of a string = 15 characters

Toolbar



The toolbar provides zoom, erase, display and edit functions. Some of these functions are not available when the input cell is on the Sort or Delete rows. Tooltips are displayed when the mouse pointer is placed on a button.

-  Show fewer grid cells (Zoom in and make cells larger)
-  Set grid cells to the default size
-  Show more grid cells (Zoom out and make cells smaller)
-  Clear grid data. When this button is pressed, a dialog box appears and allows you to reset any of the rows to the default values.
-  Set the grid columns to the default width
-  Set grid column widths to show all data in the cells
-  Cut the contents from the marked area in a cell to the clipboard
-  Copy the contents from the marked area in a cell to the clipboard
-  Paste the clipboard to the marked area in a cell
-  Undo the previous operation
-  Redo the previous operation

Sort Row

Characters in the input string can be sorted or moved to a different position. Do not confuse an alphanumeric sort with the sorting that can be performed here. What is provided here is the ability to move blocks of information to specified positions. This is easiest to explain through an example. Assume you have the following serial port input string with the sort row set to the default value of 1.

```
Sort row:      11111111111111111111
Input String: 12,  1.8725, 13.678
```

If you change the sort row to the following values, the output string will be as shown.

```
Sort row:      2221111111113333333
Input String:  12,  1.8725, 13.678
Output String: 1.8725,12, 13.678
```

The sort numbers define the first block of characters to send, the second block, the third, etc. The sort values can range from 1 to 9. If all of the sort numbers are set to the same value, no sorting will occur.

Delete Row

The character at a character position will be deleted if an **X** appears in the delete row. The **X** can be toggled by doubleclicking the cell or pressing the space bar or X key.

Replace, Insert Before & Insert After Strings

The strings for these rows can be constructed by doubleclicking the items in the listbox or by typing the strings directly into the cell. If an invalid string is entered into a cell, the string will turn **red** when the cell loses the focus. You must correct all invalid strings before leaving the mask tab. To edit a cell, start typing when the cell has the focus, doubleclick the cell or press key F2.

Parsing Character Removal (Remove Tab)

This tab specifies what characters from the input string should be removed. The mask tab allows you to specify a character at a particular position to be removed or deleted. This function is applied globally to the string and will remove all occurrences of a character. For example, you may need to remove all the blanks from the input string before sending it to your application.

If you are sending the data to an application, certain characters are always removed. The only characters that can be sent to an application are those characters that appear on the standard keyboard. The following characters will always be removed if the data is going to an application.

- Control characters from ASCII 0 to ASCII 31 except BkSp (ASCII 8), Tab (ASCII 9), CR (ASCII 13) and Esc (ASCII 27)
- Extended characters from ASCII 127 to ASCII 255

If you are sending the data to a disk file, no characters are automatically removed. If you want specific characters removed, you must specify them.

When to Remove the Characters

Characters can be removed when they are received from the serial port buffer or after a complete packet has been received. Normally, you would remove the unwanted characters after the packet has been received. If your serial device sends marking characters (i.e., {NUL}, etc.) between data packets, it may be necessary to set the *When to remove* option to *When received* so that you can clear out the unwanted characters before the packet is received and processed.

Parsing Character Replacement Strings (Replace Tab)

The replace tab allows you to replace all occurrences of a character with a string of up to 15 characters. You can specify up to 3 character/string combinations. For example, if your input string has commas separating the data fields and you want to transfer the data to Microsoft Excel, you might want to replace each occurrence of a comma with a tab.

Parsing Suffix (Suffix Tab)

The parsing suffix allows you to add a string to the end of the string that will be sent to an application or written to a file.

Example

If you are sending your data to Microsoft Excel and you used the following prefix string:

```
{Date} {Tab} {Time} {Tab}
```

If your data consisted of a single field, you may want to add the following string to position the input cursor on for the next row.

```
{Left}{Left}
```

The complete string sent to Microsoft Excel might appear as follows:

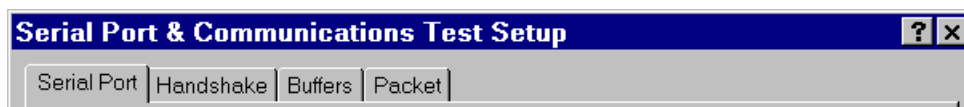
```
{Date}{Tab}{Time}{Tab}1.3850{CR}{Left}{Left}
```

The above string assumes that a carriage return (CR) or Enter key moves the input cell down 1 row.

Parsing Test (Test Tab)

Refer to the testing section on page 24 for a description of the parsing test functions.

SERIAL PORT



In order to use *WedgeLink*, you must properly configure and enable the serial port. Serial devices communicate at a variety of baud rates (9600, 4800, etc.) and can use several different sets of communications parameters (N-8-1, E-7-2, etc.). You will need to refer to the operations manual for your serial device in order to determine the proper baud and communications parameters settings. If you have trouble getting *WedgeLink* to communicate with your serial device, refer to the Troubleshooting section for some tips.

9-Pin Serial Port Connector

The pinouts for a standard 9-pin PC serial port are listed below. The standard 9-pin serial port uses a male D-Sub connector on the PC.

- 1 Carrier detect (CD)
- 2 Receive data (RXD)
- 3 Transmit data (TXD)
- 4 Data terminal ready (DTR)
- 5 Ground (GND)
- 6 Data set ready (DSR)
- 7 Request to send (RTS)
- 8 Clear to send (CTS)
- 9 Ring indicator (RI)

25-Pin Serial Port Connector

The pinouts for a standard 25-pin PC serial port are listed below. Only 9 of the 25 pins are typically used. The standard 25-pin serial port uses a male D-Sub connector on the PC.

- 2 Transmit data (TXD)
- 3 Receive data (RXD)
- 4 Request to send (RTS)
- 5 Clear to send (CTS)
- 6 Data set ready (DSR)
- 7 Ground (GND)
- 8 Carrier detect (CD)

- 20 Data terminal ready (DTR)
- 22 Ring indicator (RI)

Serial Port & Communications Parameters (Serial Port Tab)

The serial port tab is used to select the serial port, baud rate and communications parameters. The default settings for these values are COM1:9600-N-8-1. These default values will be selected when the *Default* button is pressed.

Enable All Checkbox

If the *Enable all* box is not checked, only those serial ports available on your computer will be selectable. For example, if you have 2 serial ports on your computer (COM1: and COM2:) and your mouse is connected to COM2:, only COM1: will be shown as available. You can select a serial port that is not installed or in use by another device. However, you will be given a message stating that the port is in use or not available when attempting to enable the port.

Serial Port Handshake (Handshake Tab)

The serial port handshake is used to control the flow of information between the serial device and your PC. The only time you may need a *Software* or *Hardware* handshake is when you are sending very large amounts of data from the serial device to the computer. In most cases the handshake type should be set to *None*.

Hardware Handshake

If this handshake is selected you must also select the lines for the transmit (TxD) and receive (RxD) data. The default RxD handshake line is DTR. The default TxD handshake line is DSR. You will need to refer to the operations manual for your serial device to determine what control lines to use.

Software (XON/XOFF) Handshake

The software handshake uses the XON (ASCII 17) and XOFF (ASCII 19) characters to control the data flow.

None (No Handshake)

This is the most common handshake type. When using this handshake, be sure to set an appropriate RxD buffer size.

Serial Port Buffers (Buffers Tab)

The serial port buffers control how much data can be stored before being processed by *WedgeLink* or sent to the serial device. Typically the default values of 4,000 bytes for the RxD buffer and 1,000 bytes for the TxD buffer should be sufficient.

Receive Data (RxD)

This buffer stores the serial port input before it is processed by the *WedgeLink* program. Be sure to set this to an adequate size if you have selected the handshake type as "None".

If your serial device sends a data packet consisting of 50 bytes and this packet is processed by *WedgeLink* before the next packet is sent, you will never use more than 50 bytes of the RxD buffer. This type of packet transmission and processing is typical.

Therefore, you may be able to leave the RxD buffer size at its default value.

Transmit Data (TxD)

Normally the default value of 1,000 bytes is sufficient for this buffer. If you are not sending commands to the serial device, this buffer will not be used.

Communications Test End-of-Packet (Packet Tab)

This tab will only appear when the *Serial Port Setup* dialog is accessed from the *Setup* button on *Communications Test* dialog (Test/Serial Port menu item). The end-of-packet character defined here is only used by the *Communications Test* function. It is not used by the parsing functions. When this end-of-packet character is received, the input cursor will move to column 1 of the next line.

NETWORK OVERVIEW (Network Edition Only)

You can use multiple network connections at once with *WedgeLink Network*. All of the connections are setup in the *Network Connections* dialog. This setup dialog can be accessed from the *Setup/Network Connections* menu. Testing network connections is best done with the network communications test program (ComTest_Network). Refer to the network section in Troubleshooting Tips on page 33 for additional information about the test program.

Input/Output Packets to Monitor (Network Edition Only)

The main display can only show the results for a single packet. These results consist of the input data that was received from the serial port or the network, and the parsed output packet that will be sent to the target outputs. Since there can be multiple input sources (serial port and multiple network connections), the user must choose what they want displayed in the Input Packet and Output Packet areas on the main display.

Input Source

If a specific input source is selected, the main display will show the data for the input packet as it is received from the input source. Selecting a specific input source can be very useful when trying to debug your system setup. The descriptions listed in the Source column will be Serial Port, Network Channel xx or the network channel description you entered in the Network Setup dialog. The Status column indicates the current state of the serial port or the network connection.

Show Input/Output for Last Output Packet

If the *Show input/output for last output packet* is checked, the information shown on the main display will be controlled by the last source to receive a complete data packet. When this option is selected, you will not see the input bytes shown as they are received. If you are only receiving information from a single source, it is recommended that you leave this option unchecked.

Network Setup Dialog (Network Edition Only)

The network connections are actually very easy to set up. Often when people have problems it is due to their lack of knowledge in working with networks. There are 2 sides

to a network connection, a client and a server. For a connection, it does not matter whether WedgeLink is a client or a server. However if WedgeLink is the server for a connection, the other end of the connection must be a client. To establish a connection, you should start the server side of the connection and place it in a listening mode. Next you start the client and tell it to connect to the server. The server side of the connection requires that you specify the port number but not an address. The client side of the connection requires both the port number and address be specified.

Before you try to set up connections in this dialog you should practice with the ComTest_Network program to develop an understanding of connecting clients and servers. Refer to the network discussion in the Troubleshooting Tips on page 33 for more details. This network test program can be started from the *Test\Network* menu.

A sample Network Connections dialog is shown below. The grid within the dialog contains pushbuttons, user input areas and user information areas. The grid pushbuttons are all contained in the first column and the label on the button indicates what will occur when the button is pressed. The user input areas are shown in white. The user information areas are shown in gray and cannot be directly changed by the user. Some of the user input areas can change to user information areas when a button is pressed.

Network Connections										
	Connection Pushbuttons	Client/Server	Server Port	Server Address	Parse Yes/No	Cmnds Yes/No	Description	Client Port	Client Address	Network Rx/D Buffer
1	Close Connection	Client	4000	192.168.15.12	Yes	Yes	Server 4000 @ JPSLT	1100	192.168.15.10	
2	Close Connection	Client	5000	JPSLT	No	No	Server 5000 @ JPSLT	1101	192.168.15.10	Test
3	Stop Listening	Server	6000	192.168.15.10	No	Yes	Local Computer			
4		Inactive			No	No				
5		Inactive			No	No				
6	Connect	Client	6005	192.168.15.43	No	No				
7	Start Listening	Server	8050		No	No				
8		Inactive			No	No				
9		Inactive			No	No				
10		Inactive			No	No				

Instructions:
Contents of the receive data buffer for each network connection. This field cannot be modified by the user.

Buttons: Connect All, Close All, Help, Clear Buffer, Listen All, Inactivate All, Close

Note, the network connections will not accept any data unless the Network Input is enabled. If the network is enabled, a green LED (●) will be displayed by the Network Input button in the status box on the main display.

TARGET FILE & APPLICATION

WedgeLink Lite & Standard

Target

Get Target Application...
Clear Target Application

Get Target File...
Clear Target File

WedgeLink Network

Target

Get Target Application...
Clear Target Application

Get Target File...
Clear Target File

Output Serial Port

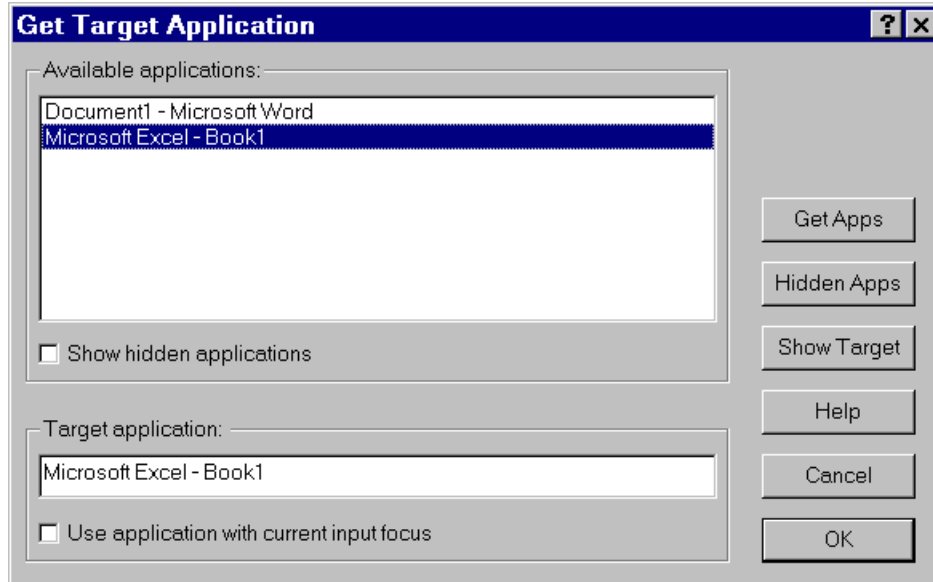
Data from the serial port can be written to a disk file and sent to an application. With *WedgeLink Network* you can also send the data to another serial port. Data parsing can be applied to the data whether it is going to a file, an application or a serial port. However, there are a couple of differences that you should be aware of:

- The end-of-packet characters for a disk file are typically a carriage return (ASCII 13) and a linefeed (ASCII 10). The end-of-packet characters for an application are typically a carriage return (ASCII 13) or a tab (ASCII 9).
- All ASCII characters (0 to 255) can be used when writing to a disk file. Only those characters found on the standard keyboard can be used when sending data to an application. The valid characters for an application are as follows:
 - ✓ Backspace (ASCII 8)
 - ✓ Tab (ASCII 9)
 - ✓ Enter or carriage return (ASCII 13)
 - ✓ Esc (ASCII 27)
 - ✓ Standard characters in center portion of keyboard (ASCII 20 to ASCII 126)

SELECTING TARGET FILE

The target file is selected with a standard file open dialog box. Select the appropriate subdirectory and filename. If the file does not exist, it will be created the first time it is written to.

SELECTING TARGET APPLICATION



Get Target Application

In order to send keystrokes to an application, you must first identify the application that is to receive the serial port data. You can identify a specific application or you can send the keystrokes to the application that currently has the input focus. You cannot identify a specific window in an application to receive the serial port data. The data will always be sent to the active window in the application. A specific target application can be selected from the list of *Available applications* or the application name can be entered into the *Target application* edit box.

To refresh the list of *Available applications*, press the *Get Apps* button.

Available Applications

The list of available applications shows the applications currently running on your PC. The list does not show the list of all applications installed on your PC. Certain currently running applications can be hidden from this list. If the *Show hidden applications* checkbox is not checked, some of the applications will not be shown. The reason for hiding some of the applications is that there are applications that you will never send data to and it is easier for the user to work with the list of applications that may receive serial port data. To transfer an application to the *Target application* edit box, doubleclick the application name. After transferring the application name to the edit box, you may want to edit the application name as described below.

Target Application

You can identify an application that is to receive the data from the serial port or you can specify that the application with the current input focus should receive the serial port data. If you want the data sent to the application with the current input focus, select the checkbox in this section of the dialog box.

If you are selecting a specific application to receive the data from the serial port, you must enter the name of that application here. You must be careful how you identify the application. *WedgeLink* takes the text string that you have entered and attempts to locate that string in the list of available applications. It is normally better to use only a portion of the application name.

Example

You have started Microsoft Excel and it has a blank sheet as the active window. The name shown in the *Active applications* list is Microsoft Excel – Book 1. If you enter Microsoft Excel – Book 1 into the *Target application*, *WedgeLink* will only find this application if Book 1 is the active window. If you change the active window or spreadsheet to gage_data.xls, *WedgeLink* will not be able to locate the target application. Therefore, it is usually better to only use the application name without any filename or active window name. In this example, any of the following *Target applications* names would be recommended.

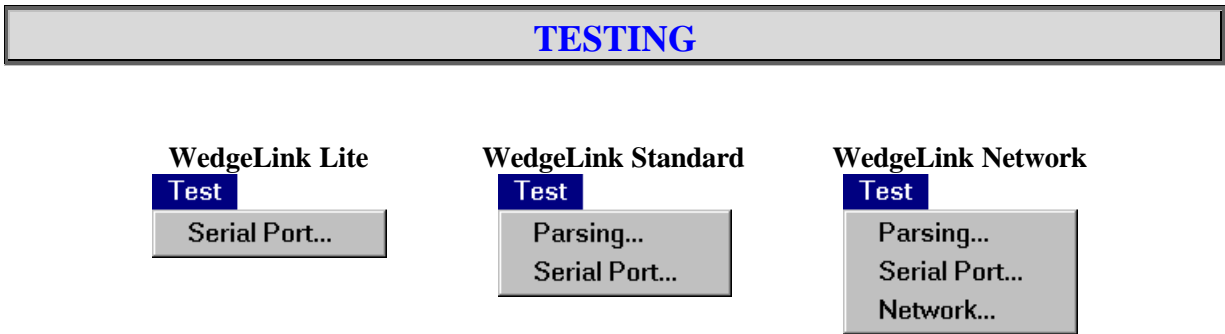
- Microsoft Excel
- microsoft excel
- Excel
- excel

If you used just the word Microsoft, *WedgeLink* might find Microsoft Excel or perhaps Microsoft Word. The application name is not case sensitive so there is no difference between Excel and excel.

Hidden Applications

Application names can be hidden from the *Get Target Application* dialog box. There are certain applications that you will never send data to and you can identify those applications in this dialog box. For example, you would not send data to Windows Explorer (Exploring) or Microsoft Office Shortcut Bar.

To enter a new application name, press the *New* button. To edit or delete an existing application name, doubleclick the name in the listbox.

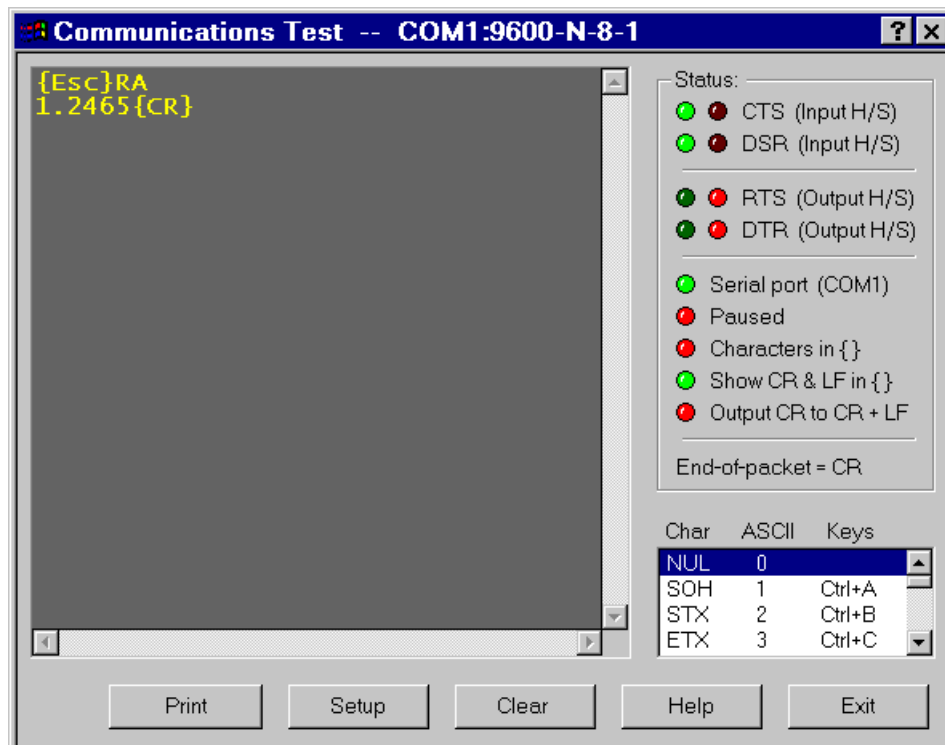


Testing functions are built into *WedgeLink* that allow you to test the serial communications and parsing setup. In setting up *WedgeLink*, the first step is to understand what serial ports you have available on your PC and what information is really coming from your serial device. After understanding the output of your serial device, you will be ready to set up any parsing that may be needed for your data.

TECHNICAL SUPPORT


The testing features are included in *WedgeLink* to assist you in understanding your serial device and to allow you to see the results of data parsing. If you are having problems with setup and testing of *WedgeLink*, you can contact technical support. However, if it is appropriate to use the testing functions and you have not tried to use them, do not call technical support.

RS232 COMMUNICATIONS TEST PROGRAM



The communications test program allows you to test the communications with your serial device. This test program is often necessary so that you can understand what is actually being sent from your serial device and how this device responds to commands sent to it.

This dialog box has a sizeable window. Use the mouse to grab a corner or edge to adjust the dialog to the desired size.

Certain characters are shown within a set of { }. For example, if you press the Esc key on the keyboard, {Esc} will appear on the screen. The string {Esc} is not sent, only the Esc character (ASCII 27). You can force other characters to be shown within { } if the *Characters in { }* is set to  (green indicator).

Status

Several indicators and buttons are available in the status area. If the text in the status area responds to the mouse being placed over it, this indicator also serves as a button. For additional information about each item in the status area, use the context sensitive help.

The first 4 items (CTS, DSR, RTS and DTR) reflect the state of the input and output handshake lines. The indicators for these handshake lines show the same type of information that is shown on the breakout box discussed in the Troubleshooting Tips section.

The end-of-packet character at the bottom of the status section is the character used by the test program to determine when the input cursor should be moved to the start of the next line. This is not the same end-of-packet character used by the parsing functions. To change this character, press the *Setup* button and then select the *Packet* tab.

Character Listbox

The character listbox enables you to send control and extended characters to your serial device. To send one of these characters, doubleclick the desired character.

Printing

The contents of the RxD/TxD screen can be printed. However, you can only print a maximum of 1 page. To identify the area to be printed, mark it using the cursor and press the *Print* button. If you do not mark an area, the information that fits on the first page will be printed.

TESTING DATA PARSING (*Standard & Network Only*)

After you have developed your data parsing, you can use the parsing test functions to see how the parsing will modify your data. When performing the parsing tests, you can manually enter the data that will come from your serial device or you can have your serial device send data to the parsing test. You can also identify whether your output target is a Windows application or a disk file.

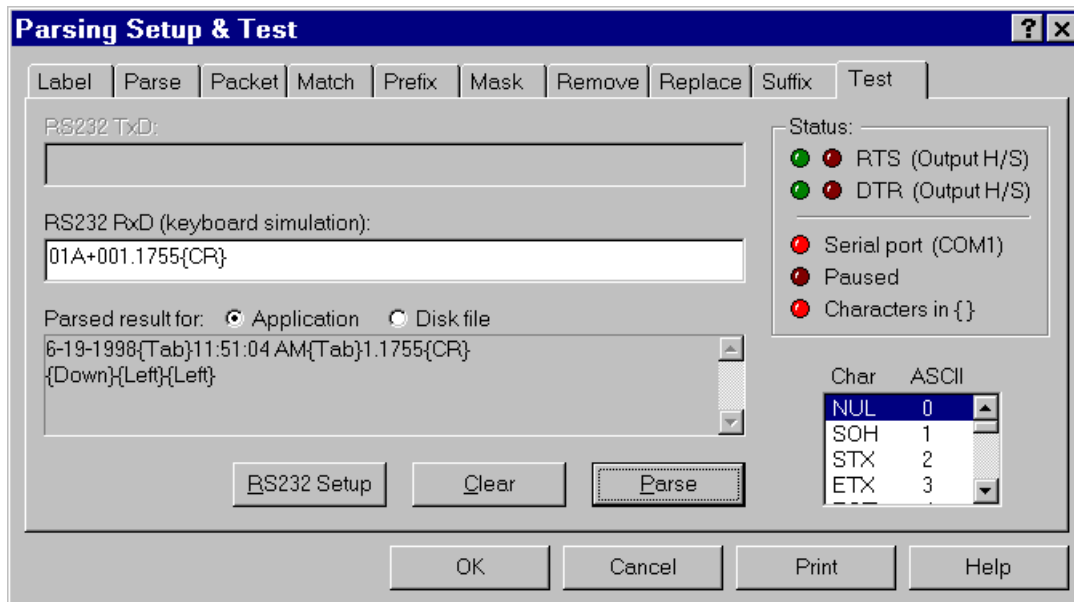
Parsing Target: Application or Disk File

Parsed result for: Application Disk file

Before starting the parsing test you must identify your output target. If you are parsing for an application, the only ASCII keyboard characters that can be output to the application are BkSp (ASCII 8), Tab (ASCII 9), Enter or CR (ASCII 13), Esc (ASCII 27) and the keys in the central portion of the keyboard (ASCII 32 to ASCII 126). Cursor control keys such as {Home}, {Left}, etc. can also be sent to the application.

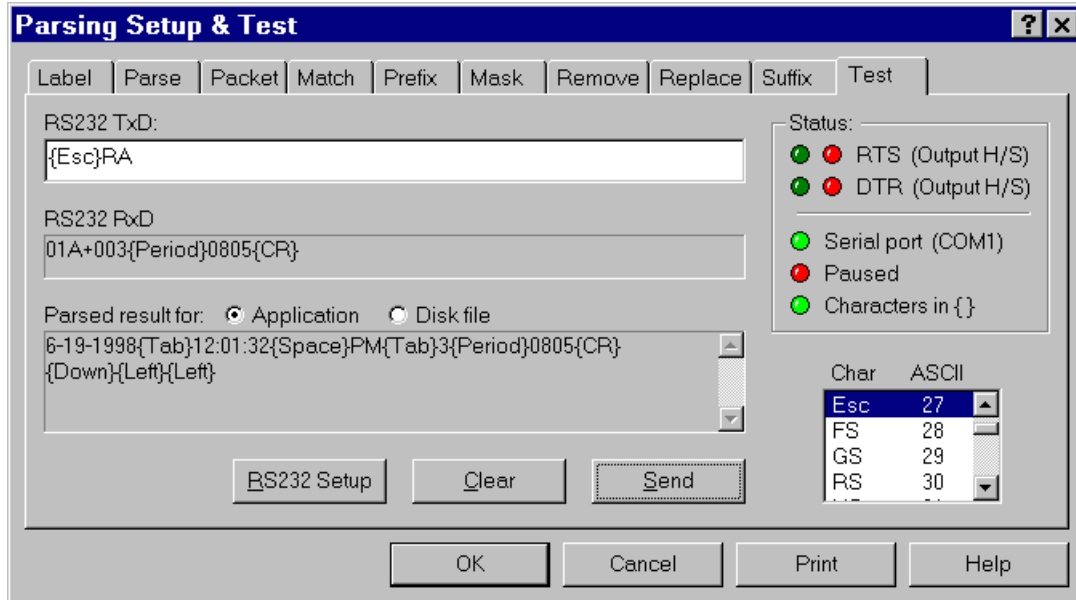
If you are parsing for a disk file, any ASCII character can be written to the file. Non-ASCII keys such as {Left}, {Down}, etc. can also be sent to the file. However, these non-ASCII keys will appear as the bracketed strings ({Left}, {Down}, etc.) in the file.

Parsing Test with Simulated Serial Port Input



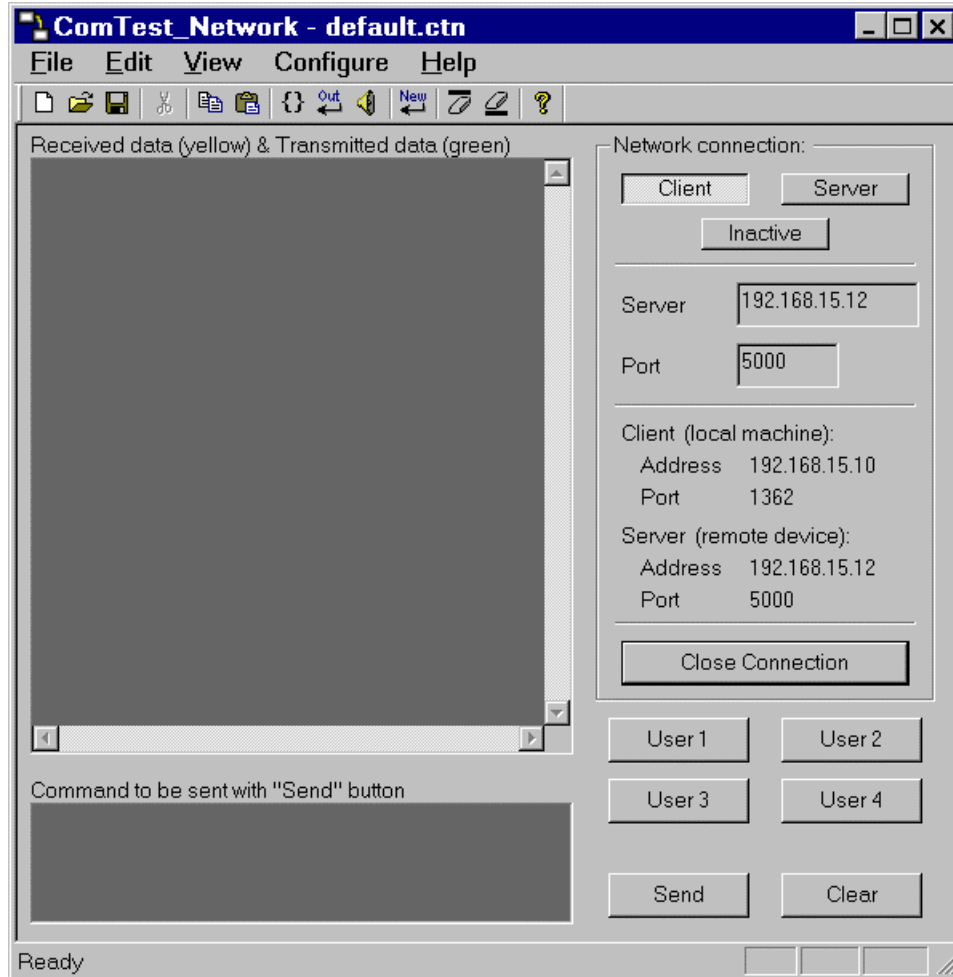
If the serial port is not enabled, you can simulate the serial port input by entering the input string into the *RS232 RxD (keyboard simulation)* edit box. Press the *Parse* button after your input string is complete and the parsed result will appear in the read-only listbox located toward the bottom of the dialog box.

Parsing Test with Actual Serial Port Input



If the serial port is enabled, the parsing test function will receive data from the serial port and will parse the data when the end-of-packet character is received. The *RS232 RxD* read-only edit box shows what information is being received from the serial port. If you want to send a command to your serial device, enter the command in the *RS232 TxD* edit box and press the *Send* button.

NETWORK COMMUNICATIONS TEST PROGRAM



The network communications test program, ComTest_Network.exe, can be accessed from the *Test/Network* menu or by double clicking on ComTest_Network.exe from Windows Explorer. The network test program, unlike the RS232 test program is a separate program. ComTest_Network was designed as a separate program so that you can place a copy of this test program on another computer for testing purposes. Normally you should be able to copy this test program to a floppy disk or transfer the test program directly across the network to another computer. You should not have to go through any installation process. However, the computer you place this test program on must have a properly configured TCP/IP network installed.

It should also be pointed out that it is possible to run 2 copies of this program on a single computer and have these 2 copies talk to each other. Refer to the network section in Troubleshooting Tips on page 33 for more details.

DATA COLLECTION

WedgeLink Lite

Collect
Send Keystrokes to Application Send to Disk File
Enable Serial Port Input
Pause Input & Output Characters in { } Always on Top Change CR to CR + LF Beep at End of Packet Clear RxD Buffer Show Minimum Window

WedgeLink Standard

Collect
<input checked="" type="checkbox"/> Send Keystrokes to Application Send to Disk File
<input checked="" type="checkbox"/> Enable Serial Port Input
Pause Input & Output Characters in { } Always on Top Change CR to CR + LF Beep at End of Packet Clear RxD Buffer Show Minimum Window Send Command Ctrl+Z

WedgeLink Network

Collect
<input checked="" type="checkbox"/> Send Keystrokes to Application <input checked="" type="checkbox"/> Send to Disk File Send to Serial Port
<input checked="" type="checkbox"/> Enable Serial Port Input Enable Network Input
RxD Buffer Status
Pause Input & Output Characters in { } Always on Top Change CR to CR + LF Beep at End of Packet Clear RxD Buffer Show Minimum Window Send Command Ctrl+Z

The collecting of the serial port data and sending it to an application or writing it to a file is controlled by Collect menu, the toolbar and the status controls. Most of the collection control functions are duplicated in these 3 areas.

In order to collect and save data to an application or a file, there are certain steps you must perform. This process is fairly simple and in most cases you should be able to start your data collection after configuring a few basic setup parameters.











- Be sure you understand what information is being sent by your serial device (use the Communications Test Program if necessary)
- Set up the data parsing (if any) that will be required for your data
- Select a target application or target file
- Configure the serial port
- If you are sending the data to an application, start the application and position the cursor where you want the data to be sent
- Enable your target (Send to app or Write to file)
- Enable the serial port
- Start collecting you data
- Use the features on the toolbar and status controls to control the data collection process








TOOLBAR



Most of the collection process can be controlled from the toolbar. You may find it useful to keep the *WedgeLink* on top and show the window at a minimum height. Using these 2 features, keeps *WedgeLink* visible and keeps its size to a minimum.

The function of each toolbar button is described below.

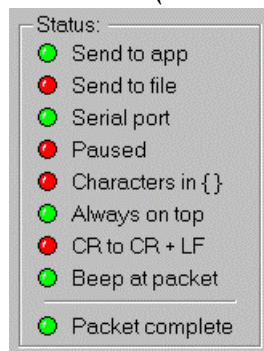
-  Create a new *WedgeLink* configuration (if you have not saved the current configuration, you will be asked if you want to save it)
-  Open an existing *WedgeLink* configuration (if you have not saved the current configuration, you will be asked if you want to save it)
-  Save the current *WedgeLink* configuration
-  Select a target application
-  Select a target file
-  Send keystrokes to the target application. You cannot select both Send to app and Write to file.
-  Write data to the target file. You cannot select both Send to app and Write to file.
-  Enable output serial port (*Network Edition Only*)
-  Enable input serial port
-  Enable network input (*Network Edition Only*)

-  Pause the serial port inputs and outputs
 -  Show certain characters in { } (these { } strings are not sent to the application or written to the file, only the actual character is sent or written)
 -  Keep *WedgeLink* on top of all other windows
 -  Clear the serial port input buffer, and the input and output strings shown on the main *WedgeLink* window
 -  Show the main *WedgeLink* window at a minimum height (this button will hide all but the title bar, menu items and toolbar)
- (Standard & Network only)
- Commands that can be sent to the serial port (these commands are configured in the Setup/Send Commands menu item)
-  Send command string to the serial port (Standard & Network only)
 -  Context sensitive help

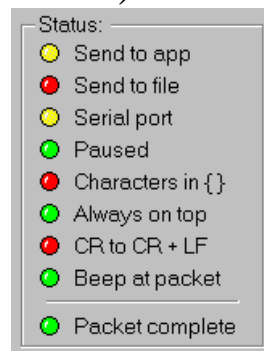
STATUS CONTROLS

The status controls allow you to quickly see the state of various *WedgeLink* control items and to set the state of several of the items. The items that can be set in the status controls will respond to the mouse being moved over the item. If the text becomes grayed when the mouse is over an item, this item is currently disabled and cannot be changed. An example of a disabled item will occur for the *Send to app* if no target application has been identified.

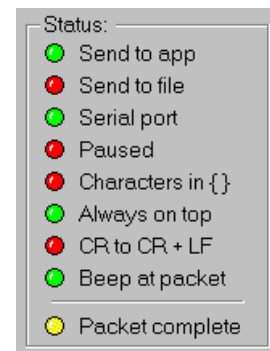
Status Indicators (*Lite & Standard Editions*)



Typical Status for Normal Operation

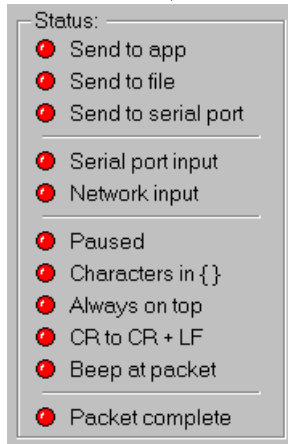


Serial Port is Paused



No End-of-Packet Character Received

Status Indicators (*Network Edition*)



Typical Status when
WedgeLink Network
Is Opened

The indicators can be green, yellow or red.

- Green indicator. The function is active or a complete data packet has been received.
- Yellow indicator. This color is associated with the *Paused* function being active and *Packet complete*. When *Paused* is active, the green indicators for *Send to app*, *Write to file* and *Serial port* will turn yellow. If *Packet complete* is yellow, characters have been received for the current packet, however the end-of-packet character has not been received.
- Red indicator. The function is disabled. In the case of *Packet complete*, this means that nothing has been received since enabling or clearing the serial port.

RXD BUFFER STATUS (*Network Edition Only*)

This dialog is accessible from the *Collect/RxD Buffer Status* menu and displays the number of bytes and contents of each of the receive data (RxD) buffers. If you have entered a description in the Network Setup dialog, the description will be shown in the Source column. You can also use the pushbuttons to clear individual buffers or clear all of the buffers.

Normally the number of bytes in a buffer would be 0 and the buffer content would be empty. If you have a number of bytes staying in a buffer, you are not receiving the identified end-of-packet character. For WedgeLink Standard & Network, you can set the end-of-packet character in the *Parsing Setup (End-of-Packet tab)* dialog.

TROUBLESHOOTING TIPS

Troubleshooting *WedgeLink* usually falls into 1 of the 3 following areas.

- Serial communications
- Network communications (*Network Edition Only*)
- Data parsing
- Sending data to an application

Most of the time that people experience difficulties, it is with serial communications. The other two areas listed generally do not present problems that are difficult to solve.

Serial Communications

One of the biggest problems in troubleshooting serial communications problems is due to the difficulty in seeing what is actually happening on the serial lines. This problem of determining the state of the serial lines can be eliminated with a device known as a data line monitor. We have known people spending hours (and in some cases days) trying to figure why they could not get serial communications to work. Typically if they had invested less than \$40.00 for a data line monitor, they could have solved their problem in a matter of minutes. These data line monitors can be obtained from a variety of sources such as Specialized Products Company (800-866-5353, www.specialized.net) and B&B Electronics (815-433-5100, www.bb-elec.com).

A data line monitor will contain a red and green LED for each signal line. When the monitor is connected to a serial line, a high signal (+ voltage) will be shown with the red LED and a low signal (- voltage) will be shown with the green LED (some monitors may reverse these colors). With the monitor connected, you will be able to determine the following:

- Is your serial device sending any data? If it is sending data, you will see the LED's for the PC received pin changing from red to green.
- Are the handshake lines properly set?
- Can your PC send commands to your serial device? If your PC can send commands, you will see the PC transmit LED's change colors. You should try to send commands to your serial device even if your serial device does not need a command to send data. If you do not see the PC transmit line changing state, you may have selected the wrong serial port, have an improperly configured serial port or have a defective serial port.

Data line monitors are available in both 9 and 25 pin configurations. Some monitors use a dual color single LED rather than 2 separate LED's for each line. We have tried some of these single LED models and feel they are of a lower quality than the dual LED models.

The following is a checklist of things to do when troubleshooting serial communications:

- Purchase a data line monitor.
- Is your serial cable wired correctly? Check the Serial Port Overview for the standard pinouts on a 9-pin and 25-pin PC serial port.
- Is your serial device connected to the serial port on your PC? The standard serial ports

are a 9-pin male or a 25-pin male D-Sub connector. If you are trying to connect to a 25-pin female connector, you are probably connecting to a parallel printer port.

- Does your serial port work with other devices or other applications?
- Does the Serial Port tab of the *Serial Port Setup* dialog indicate that the port you are trying to use is available?
- Have you enabled the serial port in *WedgeLink*?
- Do you have the proper baud rate and communications parameters set?

Network Communications (*Network Edition Only*)

In order to use network communications you must have the TCP/IP service installed and configured on your computer. You can determine if you have network communications installed by double clicking the Network icon in the Windows control Panel. You can also determine your computer name and TCP/IP address from the dialog shown when you double click the Network icon.

The best way to troubleshoot network communications problems is to use the network test program (ComTest_Network.exe) that is included with *WedgeLink Network*. This test program is a separate program from *WedgeLink Network* and can be run by selecting the Test/Network menu item or by double clicking on ComTest_Network.exe from Windows Explorer.

When performing network communications between 2 devices and/or computers, one of the devices must be a client and one must be a server. The first step in establishing network communications is to start the server and place it into a listening mode. The next step is to start the client and connect it to the server.

Testing with ComTest_Network

The first test you should do is to start 2 copies of ComTest_Network on your target computer. Set up one of these copies as a server and put it into a listening mode. Set the other copy as a client and connect it to the server. If you have entered the correct address and port number you will be able to enter inform into one copy of ComTest_Network and set it appear in to other copy. The port number you enter must be in the range from 1 to 65535. We suggest that you try using port numbers in the 4000 to 5000 range.

Once you can talk between copies of the test program on your computer, you are ready to communicate with a device or other computer on your network. It is acceptable to take a copy of the ComTest_Network program and place it on another computer for testing purposes. At this point you should perform any or all of the following procedures.

- Get ComTest_Network to communicate with *WedgeLink Network* on your target computer.
- Place a copy of ComTest_Network.exe on another compute on your network and get it to communicate with a copy of ComTest_Network on your target computer.
- Place a copy of ComTest_Network.exe on another compute on your network and get it to communicate with *WedgeLink Network* on your target computer.
- Get your network device that you will be collecting data from to communicate with ComTest_Network.

In summary, the main tasks you should perform to get your system working are to get communications established for the following items.

- Communication between *WedgeLink Network* and *ComTest_Network*.
- Communication between *ComTest_Network* and your remote network device.
- Communication between *WedgeLink Network* and your remote network device.

Data Parsing

If you are having problems with the data parsing, try using the procedures described below:

- Do you really know what your serial port input packets look like? Have you used the Communications Test Program to verify the serial input?
- If you are having problems with the data parsing, you should go to the *Test* tab on the data parsing dialog (Test/Parsing menu item). With the parsing test functions available, you should be able to determine how your input data is being modified by the parsing functions.
- It may be useful to turn off some of the parsing functions so that you can see how each parsing function is modifying your input data. The parsing functions can be turned on and off on the Parse tab in the *Parsing Setup & Test* dialog (Setup/Parsing menu item)

Sending Data to an Application

The following tips may help with problems associated with sending the data to an application:

- Have you started the application? Have you activated the proper display in the application and have you placed the cursor where you want the data to be transferred to?
- Do you know the correct name for the application? Are you looking for Microsoft Excel – Book 1, when you really should be looking for Microsoft Excel?

SUPPORT

CONTACT INFORMATION

Technical Support

(541) 593-1656

8:00 a.m. to 12:00 noon and 12:30 p.m. to 4:30 p.m. Pacific time

Main Office

MicroRidge Systems, Inc.

P.O. Box 3249

56888 Enterprise Dr.

Sunriver, OR 97707-0249

(541) 593-1656

FAX 593-5652

Web Site

Support information and the latest version of *WedgeLink* are available on our web site. Check it out at www.microridge.com.

TECHNICAL SUPPORT

Full technical support is provided for *WedgeLink*. The *WedgeLink* license is a single machine license. If you are calling for support for multiple installations, you must have purchased a license for each machine. To make your support assistance call the most productive for both you and the technical support team, please perform the following steps before calling.

Troubleshooting You Can Do Before Calling for Support Assistance

- Check the documentation.
 - ✓ Check online “Help”.
 - ✓ Check the User’s Guide.
 - ✓ Review troubleshooting tips (see page 32).
- Get the version number for the *WedgeLink* program.
- If the problem appears to be a serial communications problem:
 - ✓ Determine if any recent changes have been made to your computer.
 - ✓ Use a data line monitor to determine if data is being transmitted or received on the serial port lines. A data line monitor is a tool that can save you hours of frustration. The monitor provides a visual indication of what is happening on the serial port lines. See the troubleshooting tips for more details (see page 32).
- If you are having problems with the data parsing, you should try to use the testing function (see page 24).

- Have a phone by your computer.

Refer to Contact Information for phone numbers and web address. If you call after hours, you can leave a message and we will get back to you.

INDEX

Communications test program.....	25
ComTest_Network.....	19, 20, 36
ComTest_Network.....	29
Contact information.....	39
Data collection.....	31
Data line monitor	35, 39
Data parsing	
Character removal	
Overview.....	16
When to remove the characters.....	16
Character replacement strings	16
Description	11
Dialog box tabs	
Label	11
Mask.....	14
Match	13
Packet.....	12
Parse.....	11
Prefix.....	13
Remove	16
Replace.....	16
Suffix.....	16
Test.....	17
End-of-packet character	12, 13
End-of-packet time	13
Find first numeric field.....	12
Functions	11
Mask	
Delete row	15
Insert after string.....	16
Insert before string	16
Limits	14
Overview.....	14
Replace string.....	16
Sort row.....	15
Toolbar.....	14
Match string	13
Overview.....	11
Prefix	13
Suffix.....	16
Test.....	17
Editions	3

Evaluation program	5
Find first numeric field	12
Input/Output packets to monitor	19
Installation	7
Lite Edition	3
Network	
Overview	19
Network communications test program.....	29
Network Edition	3
Network setup dialog.....	19
Overview	4
Preferences dialog	
Date format.....	10
Overview	10
Restore at file open.....	10
Run minimized	11
Time format.....	10
Program limits	5
Quick Start.....	1
RxD Buffer Status Dialog.....	34
Send commands dialog.....	8
Send commands dialog	
Command	9
Cycle interval	9
Description	9
Number of cycles	9
When to send	9
Serial port	
25-Pin connector	17
9-Pin connector	17
Communications parameters	18
Communications test end-of-packet.....	19
Communications test program.....	25
Dialog box tabs	
Buffers.....	18
Handshake	18
Packet	19
Serial port.....	18
Enable All checkbox.....	18

Handshake	18
Hardware handshake	18
No handshake (none).....	18
Overview	17
Receive data (RxD) buffer	18
Serial port buffers.....	18
Serial port number	18
Software handshake	18
Transmit data (TxD) buffer	19
Setup	8
Standard Edition	3
System requirements.....	4
Target application	
Available applications	22
Get target application	22
Overview	22
Target file	21
Technical support	39
Testing	25
Toolbar.....	32, 33
Troubleshooting tips.....	35