## WedgeLink AT Auto Baud Rate Detection





#### Introduction

- This document reviews how the "Auto Baud Rate Detection" feature is used to connect an RS-232 serial output device to the WedgeLink AT keyboard wedge
- The WedgeLink AT User's Guide contains multiple definitions of this feature. This document will use the phrase "Auto Baud".



# WedgeLink AT





## **Required Items**

- WedgeLink AT
- RS-232 output device
- Device data cable
  - Your cable may look different
  - DB9 female end connects to the WedgeLink AT





#### Overview

- To send data from an RS-232 device to a WedgeLink AT, the baud rate and communication parameters settings must be the same on both devices
- These parameters may be changed on the WedgeLink AT or the RS-232 device
- The WedgeLink AT parameters can be set manually or by using the "Auto Baud" function



#### **Communication Parameters**

• RS-232 communication parameters consists of four variables:

Variables	Options	
Baud Rate	Multiple Options	
Parity	None, Even, Odd	
Data Bits	7 or 8	
Stop Bits	1 or 2	

- WedgeLink AT default is 9600-N-8-1
  - 9600 baud, No parity, 8 data bits, 1 stop bit



## Auto Baud Feature

- This feature is used when the parameters of your RS-232 device are unknown
- The RS-232 device must have a DATA, SEND, or PRINT button to use the Auto Baud feature
  - Your device's data send function may need to be activated
- If the RS-232 device requires a software command to send a measurement, you cannot use the Auto Baud feature



#### Installation

- Connect the WedgeLink AT to your computer using either the "Wedge" or "RS-232 & Prog" ports
- Wait for the front panel LED to turn off
- Connect your RS-232 serial device to the WedgeLink AT DB9 input port



RS-232 & Prog port

Wedge port





#### **Device Connected**





## **Auto Baud Process**

- Press and release the Reset button on the back of the WedgeLink AT
- The LED will briefly display red and then display green for 5 seconds
- Press the RS-232 device "send data" button while the green LED is on



Reset button





# **Possible Results**

- The results of the Auto Baud process will be indicated by the WedgeLink AT front panel LED
  - LED blinks GREEN 5 times
    - Parameters were identified and stored in the WedgeLink AT
  - LED blinks RED 5 times
    - Parameters could not be identified, no changes were made to the WedgeLink AT
  - LED turns off without blinking
    - No data was received, no changes were made to the WedgeLink AT
    - Retry process if this occurs



# No Data Received

- If the WedgeLink AT is unable to determine the parameters, it is likely due to one of the following reasons:
  - The data cable is not correct for your RS-232 device
  - Not enough data was sent from the RS-232 device
    - 3-8 characters are required to determine the parameters
  - The RS-232 device baud rate is not supported
    - Next slide lists the supported communication parameters



## **Supported Parameters**



#### 9600-N-8-1 factory default parameters selected



# Setup Program

- Communication parameters can be manually set using the WedgeLink AT Setup program
- This program also provides access to the WedgeLink AT's data parsing features
- To use the Setup program, the USB driver must be installed





## **Disable Auto Baud**

- By default, the Auto Baud feature is enabled on the WedgeLink AT
- Click on the "Set Parameters button on the Home Tab to disable the Auto Baud feature

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) 🚅 🖬 💷	<b>E</b>	
Home Read S	w Remove Replace Parse #1 Parse #2 Pa	arse #3
Connection status (C	OM3 @ 9600-N-8-1):	Enabled functions:
Find the	WedgeLink Send Setup	Push button read switch
WedgeLink	Information to WedgeLink	Remote read switch
Disconnect	Set WedgeLink to Defaulte	
wedgeLink	to berduits	Character removal
Connected serial dev	ice communications:	Character replacement
9600-N-8-1	(Auto hand rate detection enabled)	Parsing group 1
5000 11 1		Parsing group 2
_ Input end-of-packet:		Parsing group 3
Send immediate	Y	
Character	CR, CR/LF or LF/CR Other SOH 1 \x01 V	
Gap time	50 msec (10 to 5000)	
Minimum packet size	r	
Require a minim	um packet size Minimum packet size to process 2 (2 to 10)	Enable Disable All All
ss F1 for Help		NUM



## Manual Setup

- Selecting "No" disables the Auto Baud feature
- Manually select the baud rate, parity, data bits, and stop bits
- To save, return to the Home tab and click this button

Input Serial Port Parame	ters			×
Automatically detect the b	oaud rate & communica o use this feature you r	ation parameters: nust have a print or send	button on your serial devic	e.
Baud Rate: 300 600 1200 2400 4800 9600 14.4K 19.2K 38.4K 57.6K 115.2K	Parity: Even None Odd	Data Bits: 7 B 8	Stop Bits: 1 2	
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Send Setup to WedgeLink



# **Tech Support**

- Contact MicroRidge for assistance in using the Auto Baud Rate Detection feature
  - Mon-Fri, 8am-4:30pm PST
    - **\*\*\*** 541-593-1656
    - support@microridge.com

