

**Unique Micro Design  
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**Model 361  
Terminal Keyboard Wedge  
User Manual**

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— Model 361 User Manual

Revision History

Date	Issue	Comments
05/10/94		Issue 1
03/02/200	2	Logo, address and position statement chg

## 1. Introduction

### 1.1 Scope

This manual provides installation and configuration details for the *Unique Micro Design Model 361 Terminal Keyboard Wedge*.

### 1.2 Overview

The *Unique Micro Design Model 361 Terminal Keyboard Wedge* provides a serial port which connects between the keyboard of a Terminal ( eg Wyse 50, Wyse 60 or Link ) and the keyboard port. The *Terminal Keyboard Wedge* converts asynchronous serial RS-232 data to the appropriate keyboard characters. It is totally transparent to the terminal which accepts the serial input as if it was typed from the keyboard.

The *Terminal Keyboard Wedge* finds utility in adding serial devices such as bar code scanners to a terminal without the need to alter software. Whenever the program expects keyboard input it can accept data from the attached serial device.

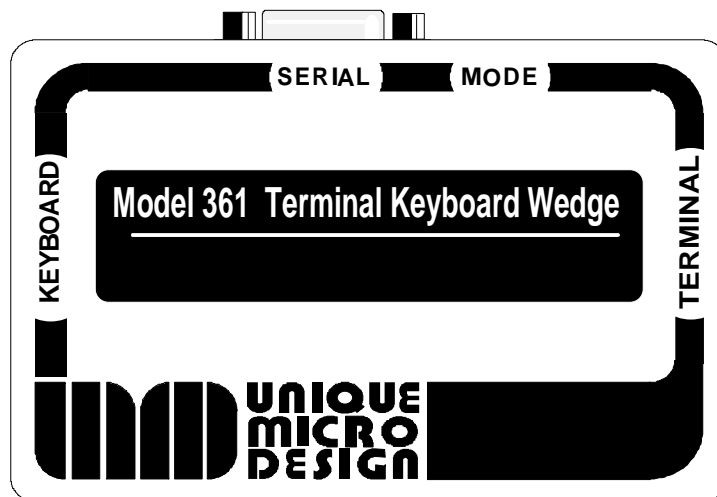
This manual describes the *Terminal Keyboard Wedge* operating with the standard firmware. Other firmware options can be provided to suit specific applications.

#### **Important Note**

There are significant differences in the design of the keyboard ports in terminals. Most keyboard ports can only provide enough power for the keyboard wedge. In nearly all cases there is insufficient power available to provide for devices connected to the Terminal Keyboard Wedge, therefore, external plug pack adapter cables are required in these instances.

### 1.3 Description

There is one full duplex serial port on the *Terminal Keyboard Wedge* and a set of four switches numbered one to four. Modular connectors are provided for connecting to terminals and their keyboards.



Upon receiving a serial input the *Terminal Keyboard Wedge* converts the ASCII characters to the “key position” of the equivalent character on the keyboard.

## 2. Installation

- 1) Turn off the terminal.
- 2) Disconnect the keyboard from the keyboard port.
- 3) Connect the terminal's keyboard to the "keyboard" interface of the *Terminal Keyboard Wedge*.
- 4) Using the appropriate cable (dependent on the type of terminal) with modular connectors, connect it between the "terminal" interface of the *Terminal Keyboard Wedge* and the keyboard port of the terminal.
- 5) Set the switches according to the mode of operation required (see the next section).
- 6) Connect the serial device (eg bar code scanner) via a suitable cable ( this may also include a plug pack to power the attached scanner ) to the serial port of the *Terminal Keyboard Wedge* and switch on the terminal.
- 7) Configure the serial device's communications parameters to 9600 baud, 8 data bits with no parity and one stop bit.
- 8) The terminal should now operate as usual and characters received on the serial interface of *Terminal Keyboard Wedge* will be "typed" into the terminal.

### 3. Configuration

#### 3.1 Blocking Modes

Input received on the serial interface may be *blocked*. Here input is buffered until a *terminator character* is received, which in the standard firmware option is the carriage return (<CR>) control character ( ie hexadecimal 0D, decimal 13 ).

Once the terminating character is received, the buffered characters ( *excluding* the terminating character ) is output followed by the optional *postamble* character.

Switch	Setting	
3	4	
OFF	OFF	no blocking
OFF	ON	blocking with no post-amble
ON	OFF	blocking with <CR> post-amble
ON	ON	blocking with <CR><CR> post-amble
where	Code	Hexadecimal, 0D
	<CR>	Decimal, 13

Switches 3 & 4, Blocking Selection

### 3.2 Keyboard Type

The serial input received by the Terminal Keyboard Wedge is converted to the key position of the equivalent character on the keyboard, switch 1 determines which keyboard type for Wyse or Link terminals the conversion represents.

Switch Setting	
1	
OFF	ASCII Keyboard
ON	101 Enhanced PC keyboard

Switch 1, Keyboard Selection  
Wyse and Link terminals.

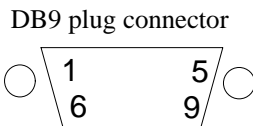
## 4. Interfaces

### 4.1 Serial port

The serial port is a full duplex RS232 interface that uses +/- 9 volt levels. Communications parameters are fixed at 9600 baud, 8 data bits with no parity and one stop bit with hardware handshaking.

Pin	I/O	Description
1	-	no connection
2	i/p	RxD
3	o/p	TxD
4	o/p	DTR
5	-	Ground
6	-	no connection
7	o/p	5 Volts ( see "Important note" in introduction)
8	i/p	CTS
9	-	no connection

Serial interface

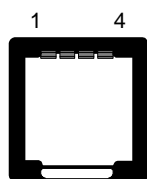


Front view of DB9 Plug



## 4.2 Keyboard interface

The “keyboard” interface of the *Terminal Keyboard Wedge* allows connection of terminal keyboards with standard modular 4 x 4 way connectors.



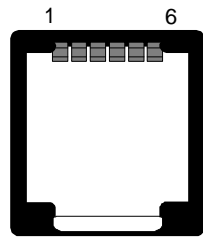
Pin Number	Function
1	Data
2	+5 Volts
3	Clk
4	Ground

Front view of keyboard interface connector.

### 4.3 Terminal interface

The “terminal” interface of the *Terminal Keyboard Wedge* allows connection of UMD standard modular adapter cable which connects to the keyboard port of the terminal.

The extra conductors allow for an external 5 volt power supply if required.



Pin Number	Function
1	+5 Volts
2	Data
3	+5 Volts
4	Clk
5	Ground
6	Ground

Front view of terminal interface connector.

#### 4.4 Modular adapter cable

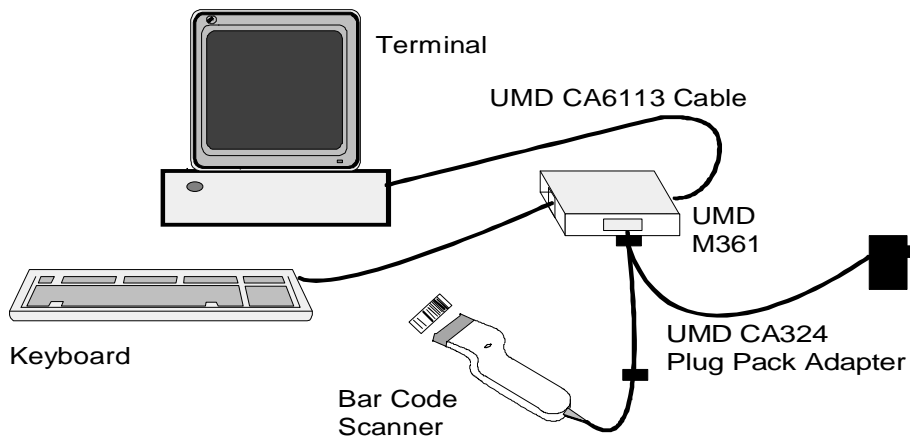
The UMD standard modular terminal adapter cable CA6113 connects between the keyboard port of the terminal and the terminal socket on the *Terminal Keyboard Wedge*. This cable suites *Wyse/Link* type terminals.

Other cables are available to suit terminals that cannot supply enough power. These cables use an external 5 volt power supply.



To M361 Terminal Socket		To Terminal Keyboard Socket	
2	Data	1	
3	+5 Volts	2	
4	Clk	3	
5	Ground	4	

## 5. Connection Example



Connecting a bar code scanner to a terminal using the Model 361

The example above shows a Wyse terminal using the UMD kit K361-200 ( see ordering information page 14 ). This kit is used when the terminal cannot supply enough power.

UMD kit K361-100 is used for Link terminals which can supply enough power to the wedge and bar code scanner.

## 6. Specifications

<b>Physical</b>	Dimensions Enclosure	67 x 93 x 38 mm Moulded ABS plastic
	Colour	Two tone (white/grey)
<b>Power</b>	Source Input Voltage	via keyboard port 5 V dc
	Input Current	35 mA (nominal)
<b>Communication Port</b>	Keyboard Port	Modular RJ11 4 way Socket
	Terminal Port	Modular RJ12 6 way Socket
<b>Serial Wedge Port</b>		DB9 Plug (DTE)
<b>Other Features</b>		Switchable Conversion for Wyse or Link ASCII or 101 keyboards .

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## 7. Ordering Information & Accessories

Part Number	Model No.	Description
9-0361-100-3	K361-100	UMD Model 361 Terminal Keyboard Wedge with CA6113
9-0361-200-9	K361-200	UMD Model 361 Terminal Keyboard Wedge with CA6113 and CA324 power adaptor cable
		<b>Documentation</b>
6-0361-992-7	DOC-M361-PD	Product Description (this document)
6-0361-991-9	DOC-M361-OD	Ordering Details
6-0361-993-5	DOC-M361-UM	User Manual (supplied with unit)
		<b>Cables</b>
2-5324-000-9	CA324	UMD Scanner plug pack power adaptor cable
2-6113-010-3	CA6113	M361 to Terminal Keyboard Port

# WARNING

Read User Manual and any Addendums  
BEFORE connecting this device to your  
equipment.

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