

Pinpad & Scanpad User Guide

Alpha Technologies

Revision 1.1 9/7/2019

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Overview

The Alpha Technologies Pinpad and Scanpad devices are intelligent microcontroller based programmable USB keypads. They can be configured to operate in either one of two different modes, USB HID keyboard or USB CDC Virtual COM port. In both of these modes, the devices use standard operating system drivers available in Windows, and installation of additional software is not required.

Features:

- USB 2.0 Full Speed Interface. Can operate as a USB HID keyboard or as a USB CDC Virtual COM Port
- 2 Line x 16 Character White on Blue LCD Display with Adjustable Backlight and Contrast Control
- 15 Key Membrane Keypad
- Beeper
- Barcode Scanner (optional)

Getting Started

Plug the device into any available USB port on the host computer. The Pinpad and Scanpad devices are shipped from the factory in USB HID mode. When the keypad first powers on, you will briefly see a sign on message (similar to that shown below) on the LCD display.



The first line on the display shows the Alpha Tech brand name while the second line shows the current USB mode (HID or CDC Virtual COM) and the current firmware version. The device will beep once and after a few seconds, the sign-on message will be replaced by the following user prompt.



The device is now ready to use.

Switching USB Mode

If you wish to change the current USB mode, follow the steps below:

- Unplug the USB cable (cable can be unplugged at either end, host computer or keypad).
- Simultaneously press and hold down the “F3” and “0” keys while plugging in the USB cable.
- Continue to hold the 2 keys down while the unit powers up. After several seconds you will hear a “two-tone” beep and you will see the following message appear on the LCD display. At this point you can release both keys.



- Press the “F1” key to select USB HID mode or press the “F2” key to select the USB CDC Virtual COM mode. You can also press the “CLEAR” key to exit this menu without making any changes. If the USB mode is changed, the Pinpad/Scanpad device will reboot.

USB HID Mode

When you configure the device to operate in USB HID Mode, the device will use the standard Windows USB keyboard driver “kbdhid.sys”. This driver will be loaded automatically by the operating system when the device is plugged in and powers up and no driver installation or configuration is required.

USB CDC Virtual COM Mode

Driver Installation

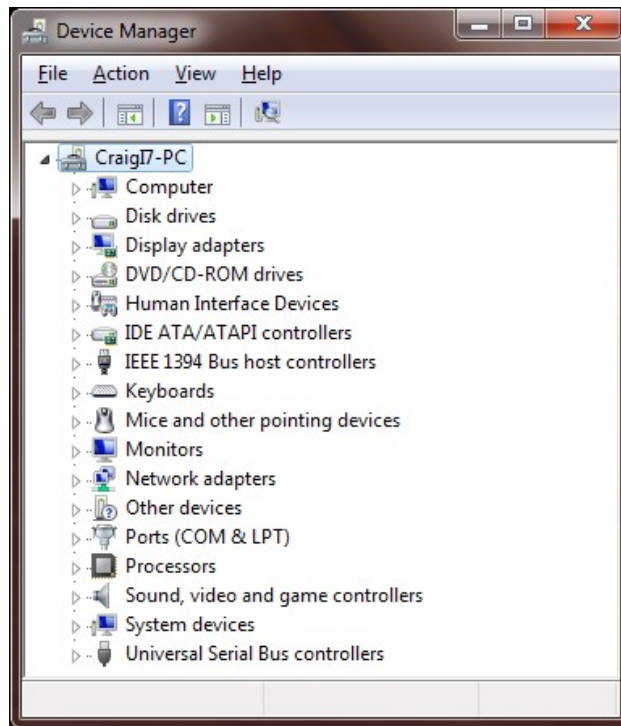
When you configure the device to operate in USB CDC Virtual COM Mode, the device will use the standard Windows USB serial driver “usbser.sys”. Most versions of Windows will identify the keypad as a CDC device and load the correct driver automatically with no user intervention. On some older versions of Windows, this driver may not automatically be loaded when the device is plugged in for the first time. In this case, Windows will usually prompt the user to install a driver from disk.

INF Files are plain text files used by Windows to locate the proper drivers for the newly installed device. Copy the “mchpcdc.inf” file onto the host computers hard drive into a directory of your choice (just remember where you are locating the file). Follow the Windows on screen prompts and select the “mchpcdc.inf” file.

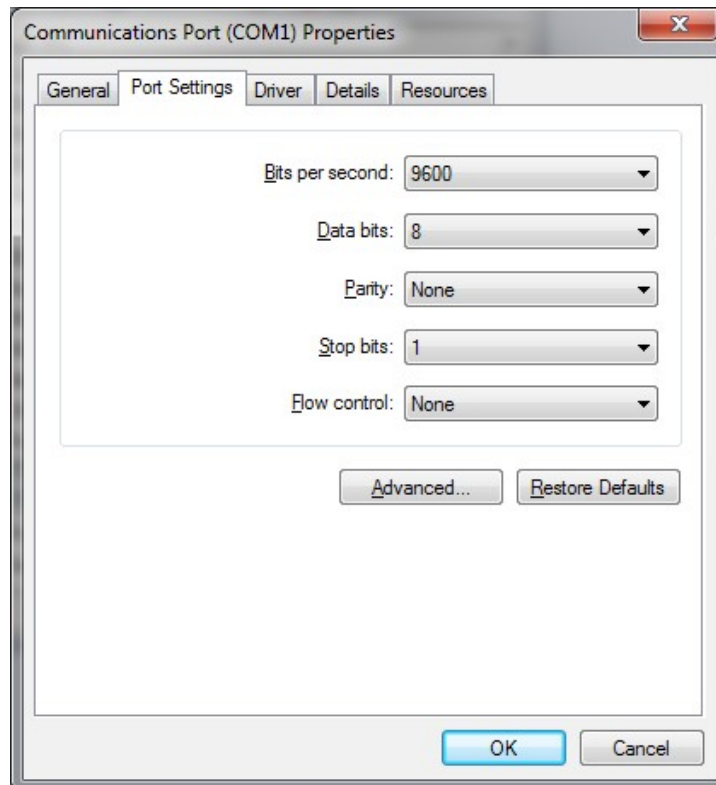
COM Port Assignment

Windows will assign a different COM Port number to each CDC COM device that is connected to the computer. If you would like to change (re-assign) the COM port number, follow the steps below:

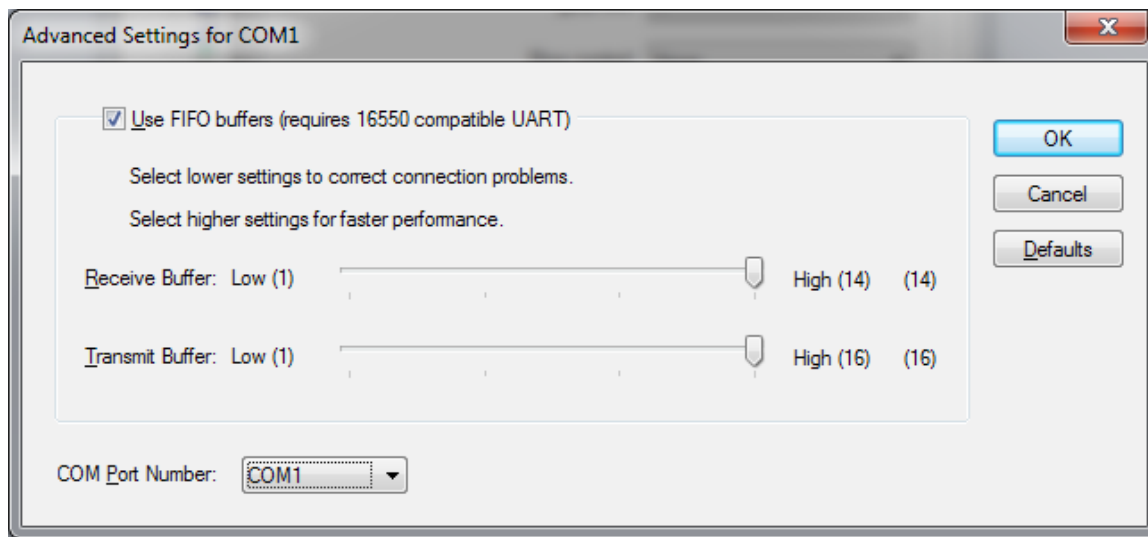
Open up Device Manager in Windows (the location and method varies depending on which version of Windows you are running, check the documentation for your system). Alternatively, in any version of Windows, you can open a command prompt and type “devmgmt.msc” followed by the “ENTER” key. The “Device Manager” dialog box will open as shown below:



Under the **“Ports (COM & LPT)”** section, double click the COM port device whose COM number you would like to modify. The following **“Communications Port (COM) Properties”** dialog box will appear:



Click the “**Port Settings**” tab and then press the “**Advanced...**” button to open up the “**Advanced Settings for COMx**” dialog box as shown below:



Use the “**COM Port Number**” drop down list box at the bottom of the dialog box to select which COM port you would like to assign to the device. Windows may show numerous COM port assignments that say “(in use)”. These may be other COM devices that were previously installed on the computer but that are no longer connected. You can re-assign these COM ports to your device if you wish, just make sure that you don't assign a COM port that is currently in use by another active device.

Using The Configuration Application

The Pinpad and Scanpad devices have many parameters that can be configured by an end user. This configuration data is stored in non-volatile flash memory on the keypad device. At power up, the device reads this configuration data from memory and uses it to configure how it operates. The Alpha Technologies Configuration Program can be used to configure or change the operating parameters of a device. Using this program, configuration data files can be uploaded from a device's flash memory, downloaded to a device's flash memory, read from disk, saved to disk, and modified.

Starting The Application

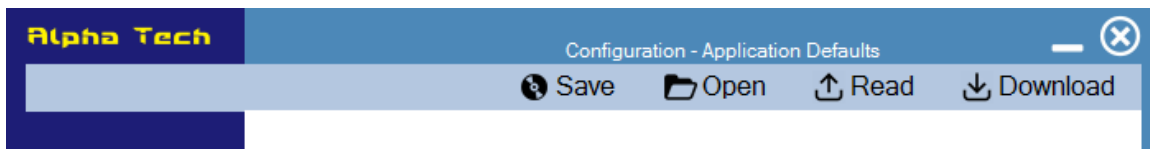
To use the configuration application, first download (or copy) the application to the hard drive of a host PC. If desired, create a shortcut for your desktop by right clicking on the application and choosing **“Create shortcut”** from the pop-up menu. Then copy (or move) this shortcut to your desktop. To start the application simply double click on the shortcut.


When the program is started, it uses a “default” configuration data file. The end user can begin modifying this existing data, load a pre-existing configuration data file from disk, or read (upload) a configuration data file from a connected device.

Note: Many of the application controls have “tool tips” associated with them. To access the tool tips, simply move the cursor over the control, button, icon, or text and the tool tip window will “pop up”. These tool tips can often help the user quickly understand the function of the control or device parameters they are trying to modify without having to refer back to the User Guide.

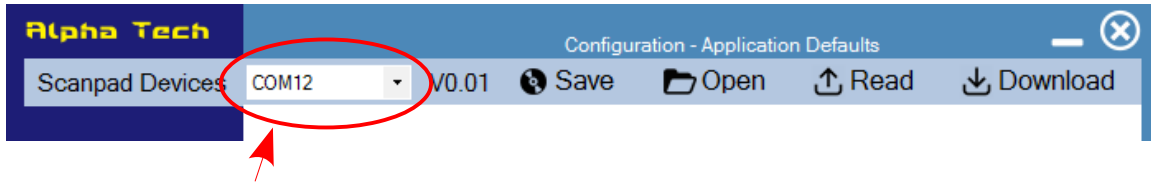
Finding Connected Devices

Before checking or changing the configuration of a device, the device must first be connected to the host PC and located by the application. When the application is started, the Top Menu Bar appears as shown below:



To find connected devices, press the  button located on the left side menu bar. The application will search all local COM ports for connected Alpha Technologies devices. After a few seconds, a dialog will appear indicating the number of devices found. If any devices are found a drop down list box will appear on the top menu bar as shown below. The currently selected device will appear in the list box window. If more than one device is

connected and found, they can be viewed and selected by simply opening the drop down list box and selecting a different device to configure. Only one device can be selected for configuration at a time.



Drop down list box showing connected devices.

Once a device is selected, the user can begin viewing and changing the configuration data.

Top Menu Bar

The Top Menu Bar (shown in the section above) is located at the top of the application. It is always visible and accessible. In addition to the drop-down list box used for selecting a device (described above), the following actions are available on the Top Menu Bar. Each of these actions are described below.

Save

Saves the current configuration data to a file. Use this button to save all of the settings that are currently displayed in the application to a configuration file on a disk or drive. This “user-defined” configuration file can be used to program other devices.

Open

Opens and loads configuration data from a file. Use this button to load a configuration file from a disk or drive. Once loaded, the settings contained in this configuration file will be displayed in the application. The user can use this option to load “pre-defined” settings into the application program and then download these settings (configuration file) to a connected device.

Read

Reads (uploads) the configuration data from a connected device. Use this button to read the configuration data from the non-volatile memory on a connected device. Once uploaded, the device settings are displayed in the application. This can be used to simply view the current settings of a device. Alternatively, the settings can be modified and then downloaded back to the device, or saved to a file on a disk or drive.

Download

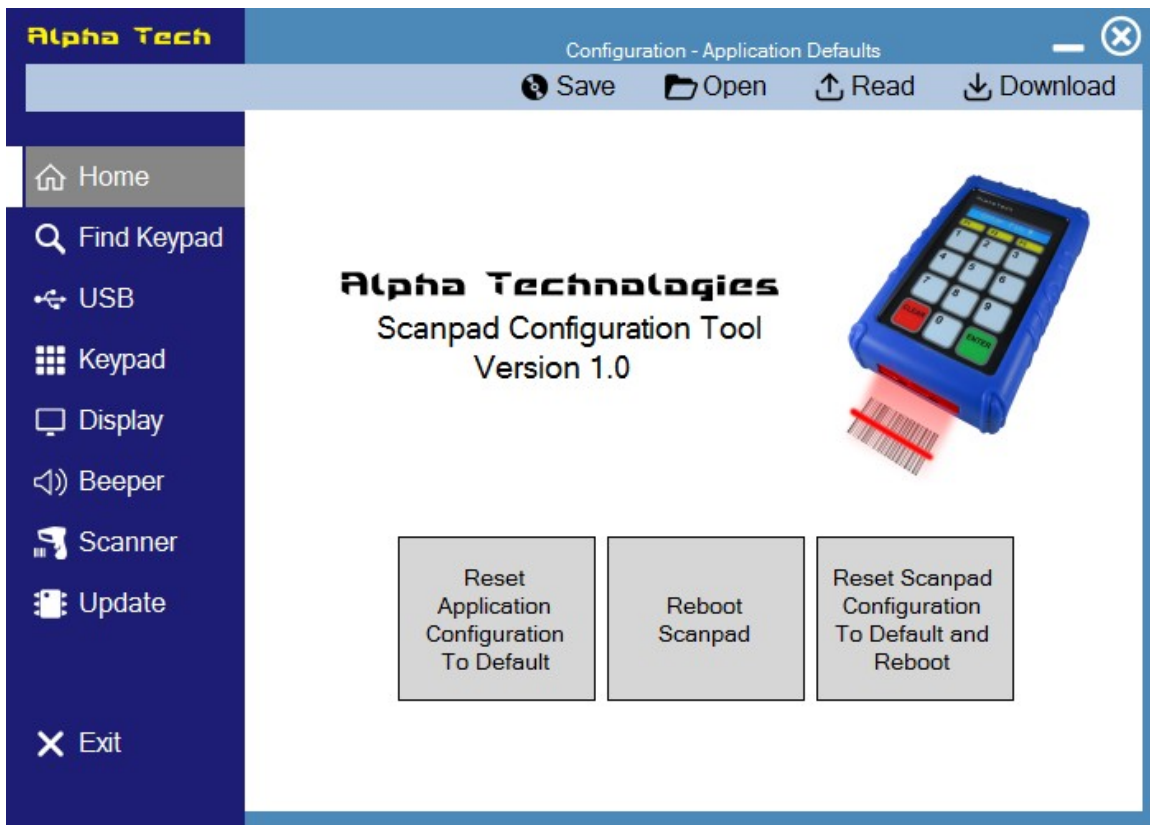
Write (download) the configuration data to a connected device. Use this button to write the configuration data from the application to the non-volatile memory on a connected device. Once downloaded, the device will operate using the new configuration settings and does not need to be rebooted.

Left Menu Bar

The Left Menu Bar is located on the left side of the application and is always visible and accessible. The following actions are available on the Top Menu Bar.

Home Menu

When the **Home** button is selected, the following menu is displayed.



Three buttons are available on the Home Menu.

Reset Application Configuration To Default

This button resets the configuration data in the program to its default values. These are the same values present when the program is started.

Reboot Scanpad

This button sends a “Reboot” command to the connected device causing the device to reboot.

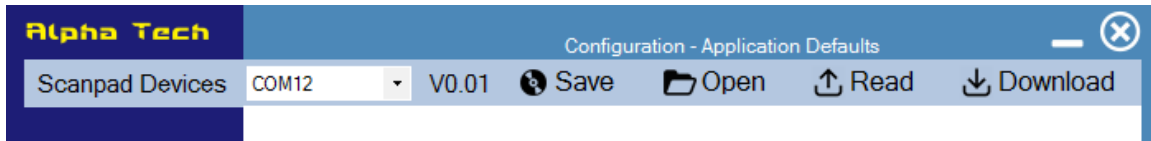
Reset Scanpad Configuration To Default and Reboot

This button sends a “Reset” command to the connected device. This command resets the configuration data on the device to the default (factory settings) and then reboots the device. When the device reboots, it may be in USB HID mode and you may need to change the device back to USB CDC Virtual COM mode if you wish to continue configuring the device

using the Configuration program.

Find Keypad

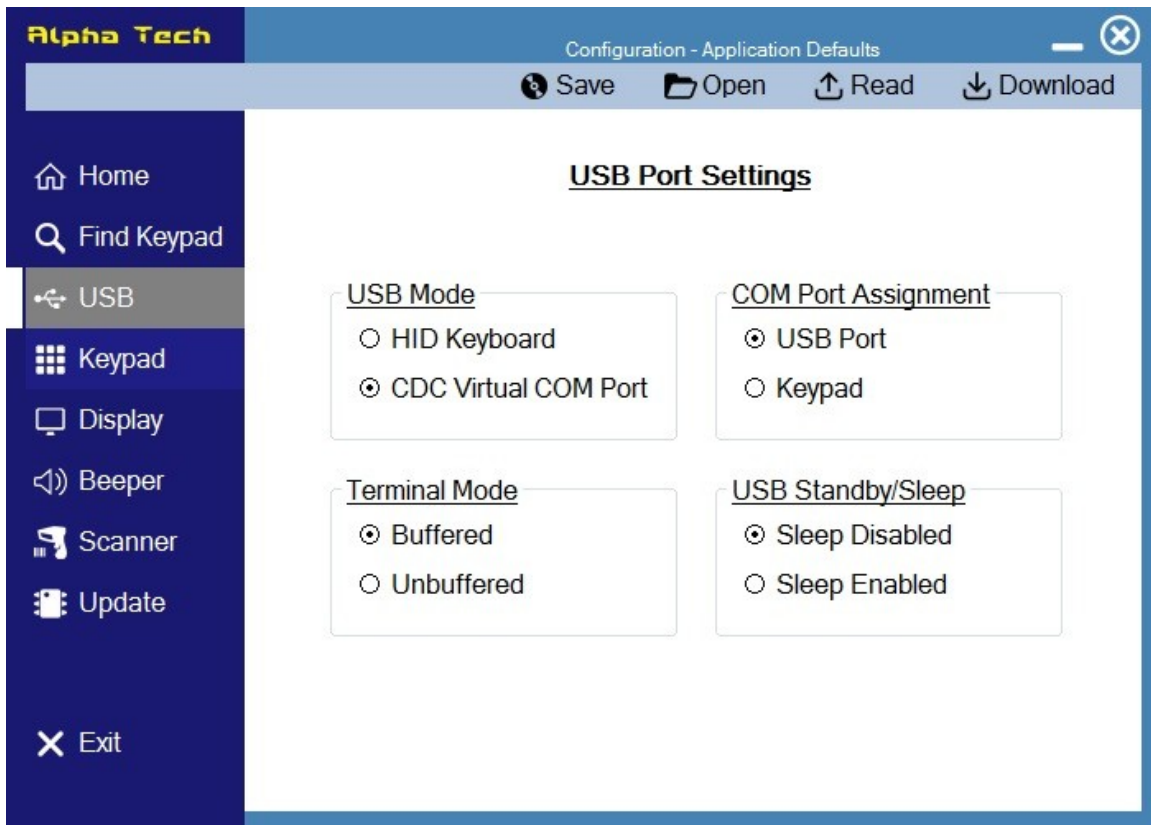
Press the **Find Keypad** button to locate all devices connected to the host computer. If you have devices that are connected and powered up but are not located by the Configuration program, check to make sure that the devices are configured in USB CDC Virtual COM mode. Devices that are in USB HID mode cannot be detected by the Configuration Utility. If devices are located, a drop down list box will appear in the Top Menu Bar showing all detected devices as shown below.



If multiple devices are connected and located, use the drop down list box to select the device that you would like to configure.

USB Menu

When the **USB** button is selected, the following menu is displayed.



The following four parameters can be set on the USB Port Settings page.

USB Mode

This option selects the type of USB communication interface to use with the device. Select “HID Keyboard” to configure the device as a standard Windows HID keyboard or select the “CDC Virtual COM Port” option to make the device appear as a virtual serial COM port. You can have multiple devices connected to a single host computer using the HID Keyboard mode but you will not be able to differentiate between them. If you have multiple devices connected to a single computer using the CDC Virtual COM Port option, the host computer can differentiate between devices because each one will be assigned a different COM port number when the device powers on and connects to the computer. Windows typically assigns a COM port number of its own choosing, but the end user can use “Device Manager” to manually assign a specific COM port (see the previous section, “Getting Started” for a detailed description).

COM Port Assignment

This option is only available when the USB Mode is set to “CDC Virtual COM Port” and is disabled when the device is configured in “HID Keyboard” mode. When set to the “USB Port” option, the COM port number assigned by Windows (or assigned manually by the end user using Device Manager) will remain with the specific USB port. If devices are swapped between USB ports or replaced with new devices the COM port numbers assigned will not move with the device but will remain with the USB port. When set to the “Keypad” option, the COM port number assigned by Windows will “follow” the device if it is moved from one USB port to another.

Terminal Mode

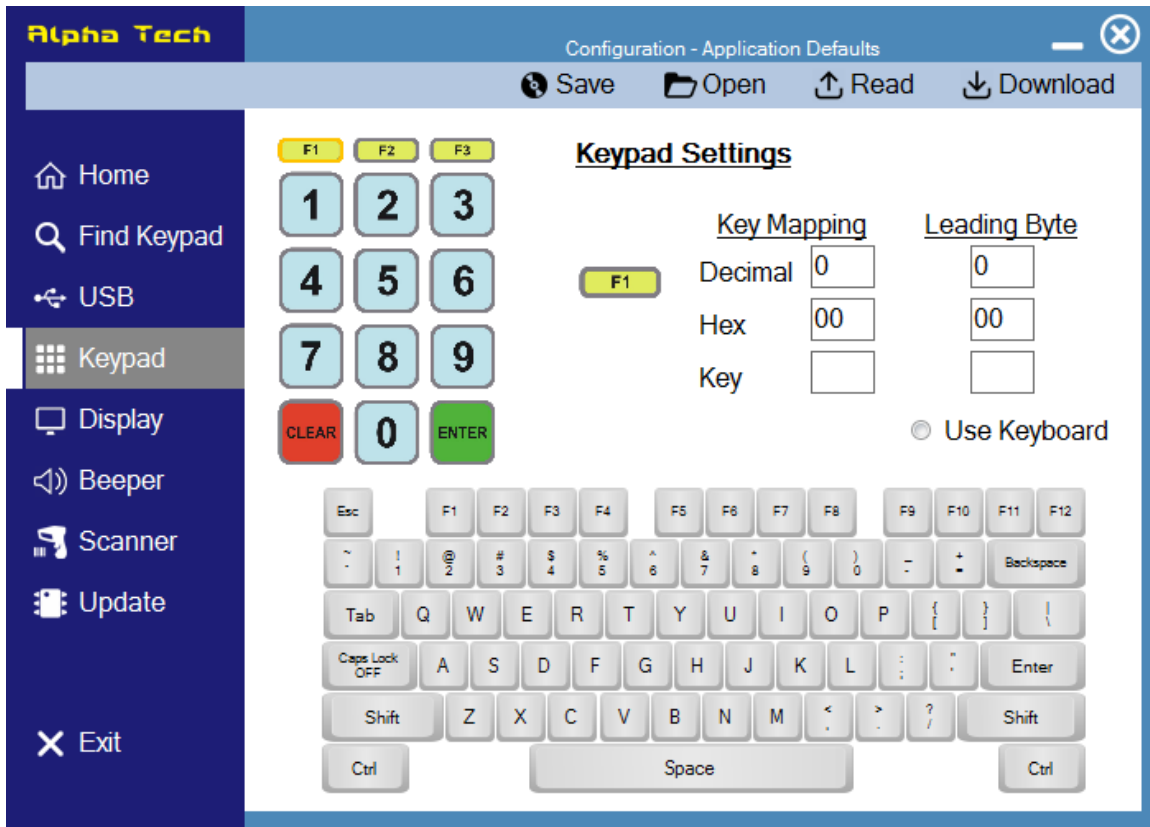
This option determines how keypad data is sent to the host computer. When “Buffered” mode is selected, key codes are buffered on the Pinpad/Scanpad device and only sent to the host computer when the “ENTER” key is pressed. The “CLEAR” key erases any key data that is currently buffered (no “CLEAR” key code is transmitted). When “Unbuffered” mode is selected, key codes are sent to the host computer as the keys are pressed. In this mode, the “CLEAR” key code is sent when the “CLEAR” key is pressed.

USB Standby/Sleep

When the **Sleep Disabled** option is selected, the device will remain powered up and fully operational, even if the PC enters sleep mode. The device does not have the ability to wake up the PC. When the **Sleep Enabled** option is selected, the device will enter sleep mode whenever the PC goes to sleep and the USB bus goes idle. In this mode, to save power, the LCD display will dim and the barcode scanner (if present) will power off. When the PC wakes up and the USB bus becomes active, the device will automatically wake up and return to normal operation.

Keypad Menu

When the **Keypad** button is selected, the following menu is displayed.



The key codes that are sent to the host computer via the USB bus differ based on which USB mode the device is currently in, USB HID or USB CDC Virtual COM (see **Appendix A – USB Key Codes** for a detailed description of the key codes and key mapping). When operating in USB HID mode, USB HID key codes are sent. When operating in USB CDC mode, ASCII key codes are sent. The Pinpad/Scanpad device will send the correct code based on the currently selected USB mode.

Use this menu to assign key codes to individual keys. First, from the simulated keypad menu on the upper left, click the key whose key code you would like to change. The selected key will be hi-lighted with a yellow border and the key will appear in the middle of the page just to the left of the **Key Mapping** controls. At this point, there are four ways to specify a new key code.

- Type the decimal value for the key code into the **Key Mapping – Decimal** text box.
- Type the hexadecimal value for the key code into the **Key Mapping – Hex** text box.
- Type the actual key on your PC keyboard into the **Key Mapping – Key** text box.
- Use the simulated keyboard at the bottom of the page and click the desired key.

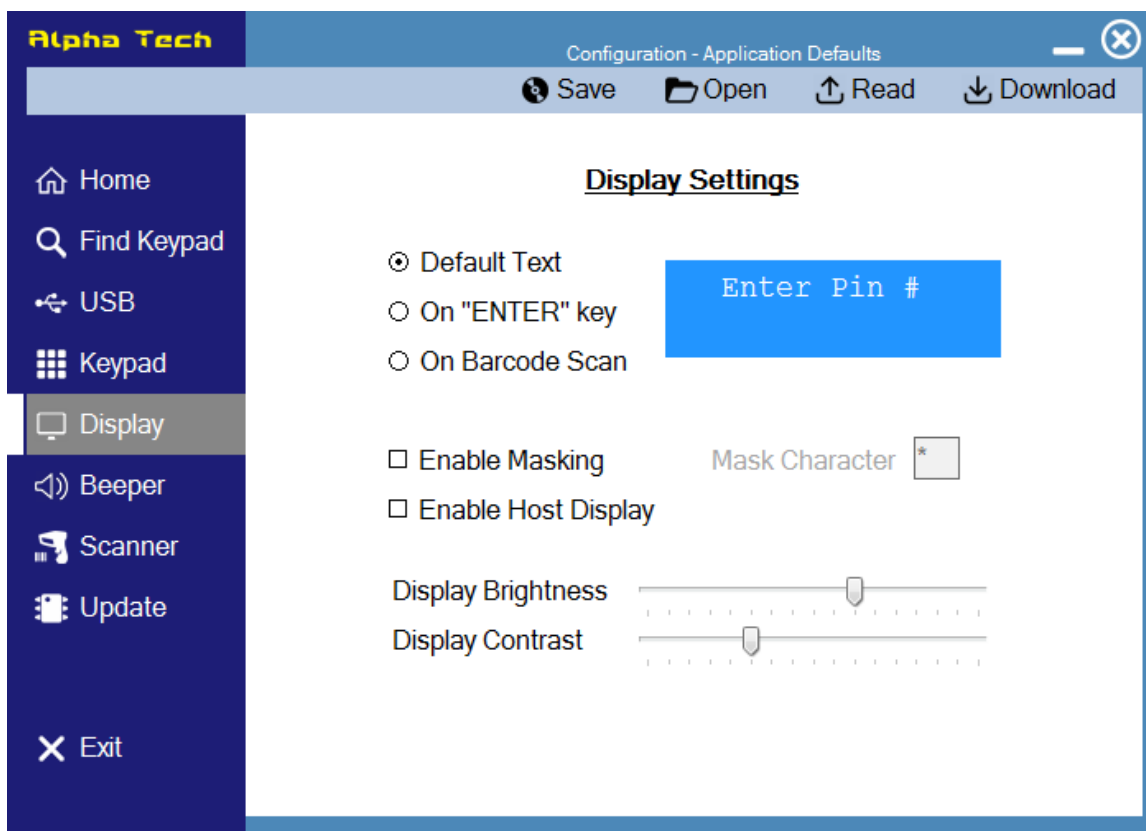
The **Leading Byte** controls can be used to add a leading byte when the keypad device is operated in buffered mode (ie. the keypad buffers key presses and only sends key data when the ENTER key is pressed). When operating in unbuffered mode, this setting is ignored. To disable the leading byte, simply set this field to '0'. **Leading Byte** data can be entered using the same methods used to set the **Key Mapping** controls. To use the simulated keyboard to edit this control, click the **Use Keyboard** radio button.

When operating in buffered mode, key codes for the numbered keys, 0-9, are buffered on the device and sent to the host PC whenever the ENTER key is pressed. Key codes for the CLEAR key are not sent to the host. The CLEAR key operates as a local BACKSPACE key when the key code is set to represent a backspace (hex 08 or decimal 8) or operates as a CLEAR key (clears all previously buffered keys) when set to any other value.

When operating in unbuffered mode, key codes for the numbered keys(0-9), the CLEAR key, and the ENTER key, are all sent to the host PC immediately upon being pressed. The ENTER and BACKSPACE keys have no affect on the display in this mode.

Display Menu

When the **Display** button is selected, the following menu is displayed.



There are a number of options that can be changed using this menu.

Default Text

This is the text string that is displayed when the Pinpad or Scanpad device is waiting for the user to type keys or scan a card. The default string is **“Enter Pin #”**. To change, use the radio button to select this item and change the text in the simulated LCD screen.

On “ENTER” Key

This is the text string that is displayed when the user presses the **“ENTER”** key. The text will be displayed for 1 second, after which the display will change back to the **“Default Text”** value. To change, use the radio button to select this item and change the text in the simulated LCD screen.

On Barcode Scan

This is the text string that is displayed when a barcode is scanned. The default string is **“Card Read OK”**. The text will be displayed for 1 second, after which the display will change back to the **“Default Text”** value. To change, use the radio button to select this item and change the text in the simulated LCD screen.

Masking

Masking can be used to “hide” the key presses being shown on the LCD display. If disabled, key characters are shown on the display when keys are pressed. When enabled, the key characters are replaced with the character specified in the **Mask Character** text box.

Enable Host Display

This control has no affect when operating the device as a USB HID keypad. When operating as a USB CDC Virtual COM port this control, when enabled, allows the host PC to have partial control of the display. When the host sends a CR (carriage return, hex 0D, decimal 13) the display will be cleared and the “cursor” reset to 0. When the host sends a backspace (hex 08, decimal 8) the display will remove the most recently displayed character and decrement the “cursor”. All other characters sent by the host PC will appear on the display and the “cursor” will increment. When disabled, all charcters sent to the display from the host PC will be ignored.

Display Brightness

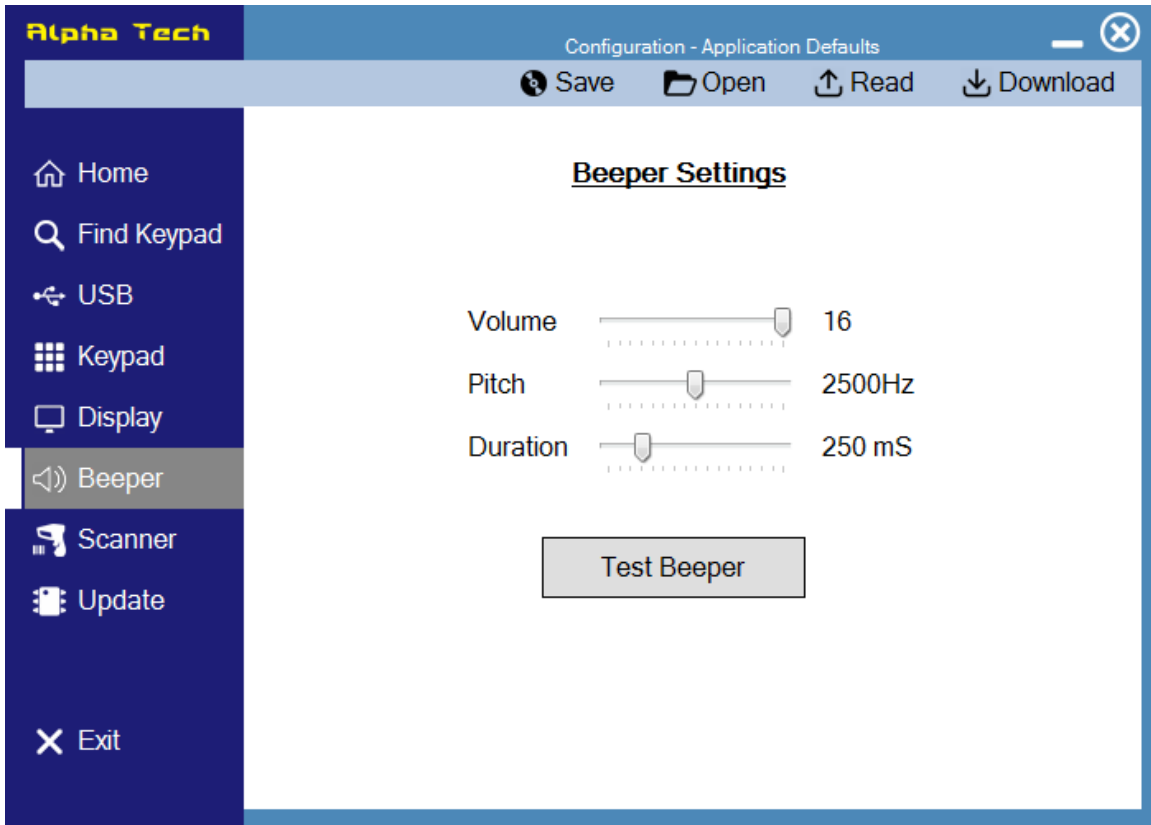
Use the slider control to change the brightness of the LCD display by increasing or decreasing the display's backlighting.

Display Contrast

Use the slider control to change the contrast between the white display characters and the blue display background.

Beeper Menu

When the **Beeper** button is selected, the following menu is displayed.

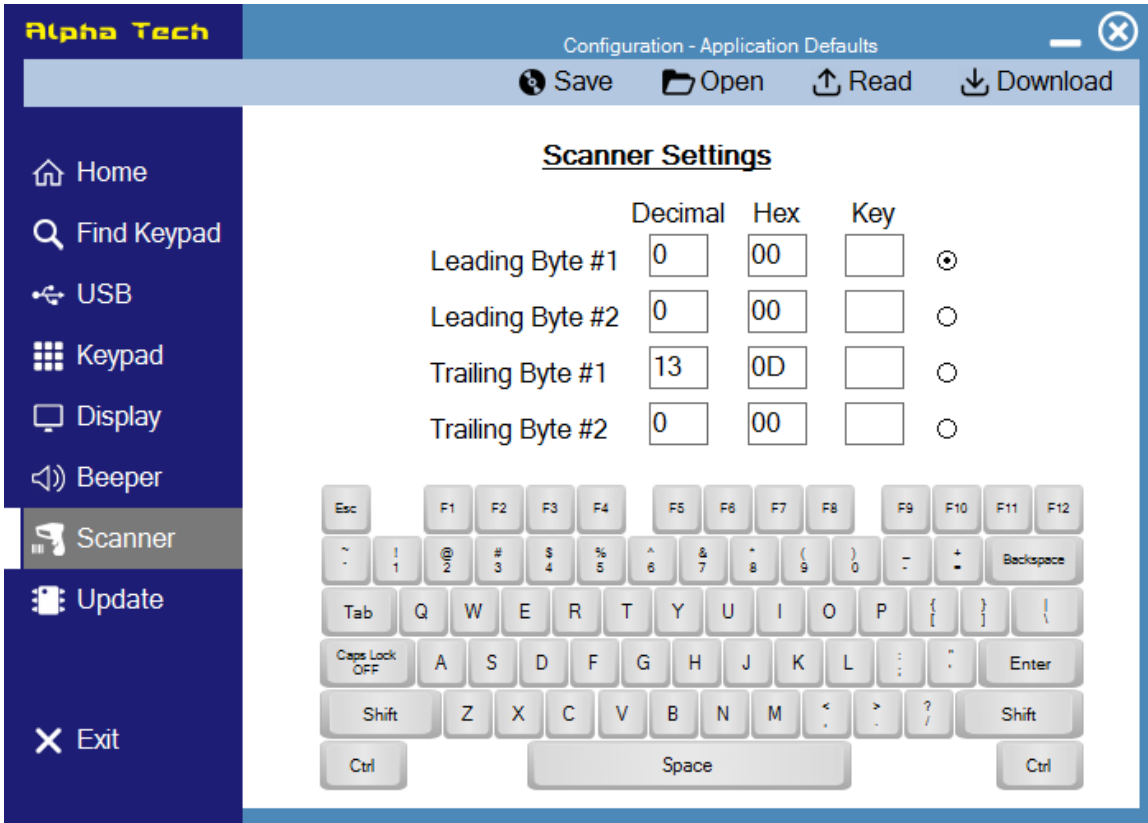


Use the 3 slider controls to set the beeper volume, beeper pitch, and beeper duration. Then press the **“Test Beeper”** button to send a command to the device to test the beeper settings.

Testing the beeper does not save the settings to the device's flash memory. To change the beeper settings on a device, simply use the “Read” button on the Top Menu Bar to upload the device's configuration file into the Configuration program, test the beeper until you are happy with the settings, then press the “Download” button to write the updated settings back to the device's flash memory.

Scanner Menu

When the **Scanner** button is selected, the following menu is displayed.



	Decimal	Hex	Key	
Leading Byte #1	<input type="text" value="0"/>	<input type="text" value="00"/>	<input type="text"/>	<input checked="" type="radio"/>
Leading Byte #2	<input type="text" value="0"/>	<input type="text" value="00"/>	<input type="text"/>	<input type="radio"/>
Trailing Byte #1	<input type="text" value="13"/>	<input type="text" value="0D"/>	<input type="text"/>	<input type="radio"/>
Trailing Byte #2	<input type="text" value="0"/>	<input type="text" value="00"/>	<input type="text"/>	<input type="radio"/>

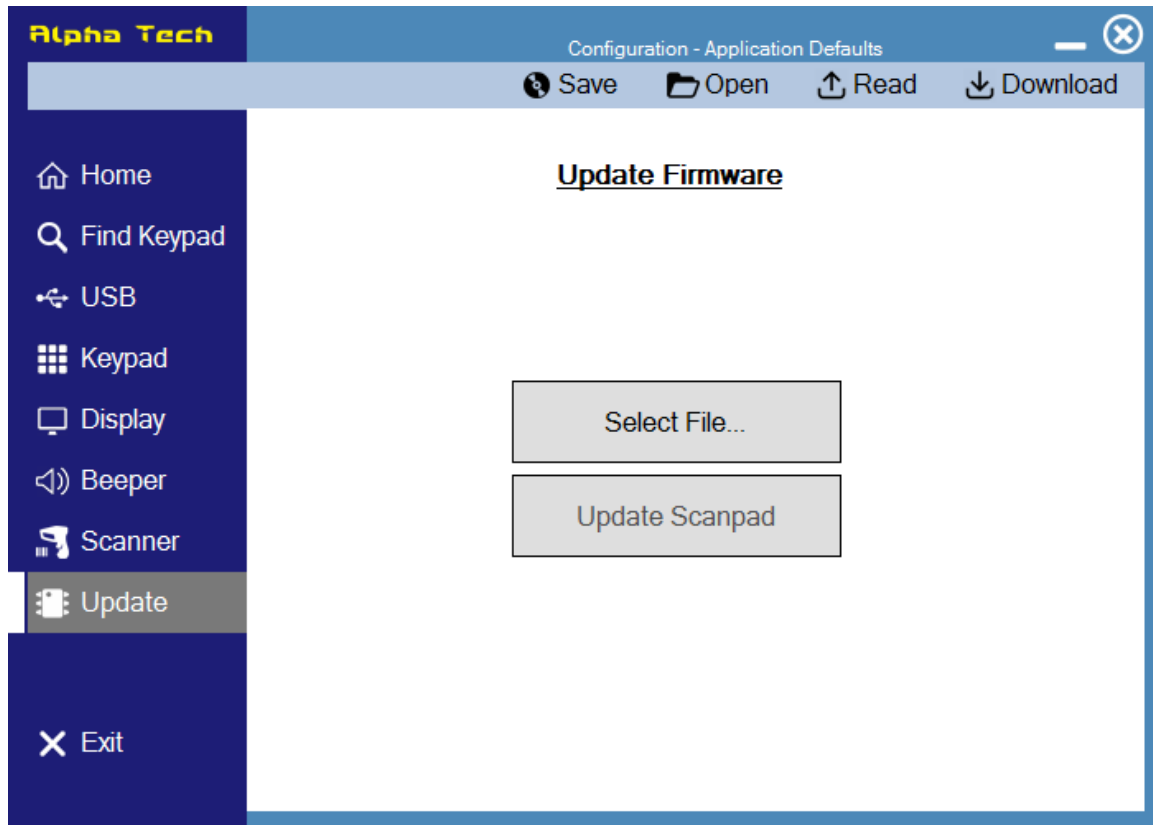
The simulated keyboard at the bottom of the window includes the following keys: Esc, F1-F12, ~, 1-0, Tab, Q-W-E-R-T-Y-U-I-O-P, Caps Lock, A-S-D-F-G-H-J-K-L, Shift, Z-X-C-V-B-N-M, Space, and Ctrl.

When a barcode is scanned, the Pinpad/Scanpad device will immediately transmit the barcode information to the host PC. The end user can “frame” this data with up to two leading bytes and two trailing bytes. If you don't want to add any leading or trailing bytes, just leave that specific field empty by entering a Decimal “0”, Hexadecimal “00”, or leave the “Key” field blank. There are four ways to specify a leading or trailing byte.

- Type the decimal value for the key code into the **Decimal** text box.
- Type the hexadecimal value for the key code into the **Hex** text box.
- Type the actual key on your PC keyboard into the **Key** text box.
- Use the simulated keyboard at the bottom of the page and click the desired key. Use the radio button to the right of the text boxes to select which Leading or Trailing byte field you wish to modify using the simulated keyboard.

Update Menu

When the **Update** button is selected, the following menu is displayed.



The update menu is used to download new firmware to a Pinpad or Scanpad device. During the product's lifetime new firmware may be released that adds new features or fixes bugs. To update the firmware follow the steps below:

- Use the “**Find Keypad**” button to locate all connected devices and choose (from the drop down list box) the specific device who's firmware you wish to update.
- Press the “**Select File...**” button to bring up a “File Open” Dialog box. Use this Dialog box to locate and select the appropriate firmware file (firmware files will have a “.hex” extension).
- Press the “**Update Scanpad**” button and wait while the firmware is downloaded and programmed into the device. Updating will take about 1 minute (you will see the update status shown on the Configuration application as well as the device's LCD display).

WARNING: Do not unplug the Scanpad/Pinpad device during the update process!

Appendix A - USB Key Codes

The following table list all of the key codes that are currently supported by the Pinpad and Scanpad devices. Use the Configuration program to specify the desired key in Hex or Decimal. When configured for USB CDC Virtual COM the corresponding ASCII codes are sent to the host PC. When the device is configured for USB-HID the corresponding USB-HID codes are sent. USB HID codes that are listed in the table as “unused” will send a “no key press” code.

If you would like to use key codes that are listed as unused or use specific USB-HID key codes that are not listed in this table, contact Alpha Technologies to inquire about custom firmware.

Hex	Decimal	ASCII	USB-HID
0x00	0	null	unused
0x01	1	SOH	unused
0x02	2	STX	unused
0x03	3	ETX	unused
0x04	4	EOT	unused
0x05	5	ENQ	unused
0x06	6	ACK	unused
0x07	7	BEL	unused
0x08	8	Backspace	0x2A
0x09	9	Tab	0x2B
0x0A	10	Line Feed	Ctrl + 0x28
0x0B	11	VT	unused
0x0C	12	FF	unused
0x0D	13	CR	0x28
0x0E	14	SO	unused
0x0F	15	SI	unused
0x10	16	DLE	unused
0x11	17	DC1	unused
0x12	18	DC2	unused
0x13	19	DC3	unused
0x14	20	DC4	unused
0x15	21	NAK	unused
0x16	22	SYN	unused
0x17	23	ETB	unused
0x18	24	CAN	unused
0x19	25	EM	unused

Hex	Decimal	ASCII	USB-HID
0x1A	26	SUB	unused
0x1B	27	ESC	0x29
0x1C	28	FS	unused
0x1D	29	GS	unused
0x1E	30	RS	unused
0x1F	31	US	unused
0x20	32	Space	0x2C
0x21	33	!	Shift + 0x1E
0x22	34	“	Shift + 0x34
0x23	35	#	Shift + 0x20
0x24	36	\$	Shift + 0x21
0x25	37	%	Shift + 0x22
0x26	38	&	Shift + 0x24
0x27	39	'	0x34
0x28	40	(Shift + 0x26
0x29	41)	Shift + 0x27
0x2A	42	*	Shift + 0x25
0x2B	43	+	Shift + 0x2E
0x2C	44	,	0x36
0x2D	45	-	0x2D
0x2E	46	.	0x37
0x2F	47	/	0x38
0x30	48	0	0x27
0x31	49	1	0x1E
0x32	50	2	0x1F
0x33	51	3	0x20

Hex	Decimal	ASCII	USB-HID
0x34	52	4	0x21
0x35	53	5	0x22
0x36	54	6	0x23
0x37	55	7	0x24
0x38	56	8	0x25
0x39	57	9	0x26
0x3A	58	:	Shift + 0x33
0x3B	59	;	0x33
0x3C	60	<	Shift + 0x36
0x3D	61	=	0x2E
0x3E	62	>	Shift + 0x37
0x3F	63	?	Shift + 0x38
0x40	64	@	Shift + 0x1F
0x41	65	A	Shift + 0x04
0x42	66	B	Shift + 0x05
0x43	67	C	Shift + 0x06
0x44	68	D	Shift + 0x07
0x45	69	E	Shift + 0x08
0x46	70	F	Shift + 0x09
0x47	71	G	Shift + 0x0A
0x48	72	H	Shift + 0x0B
0x49	73	I	Shift + 0x0C
0x4A	74	J	Shift + 0x0D
0x4B	75	K	Shift + 0x0E
0x4C	76	L	Shift + 0x0F
0x4D	77	M	Shift + 0x10
0x4E	78	N	Shift + 0x11
0x4F	79	O	Shift + 0x12
0x50	80	P	Shift + 0x13
0x51	81	Q	Shift + 0x14
0x52	82	R	Shift + 0x15
0x53	83	S	Shift + 0x16
0x54	84	T	Shift + 0x17
0x55	85	U	Shift + 0x18
0x56	86	V	Shift + 0x19
0x57	87	W	Shift + 0x1A
0x58	88	X	Shift + 0x1B
0x59	89	Y	Shift + 0x1C

Hex	Decimal	ASCII	USB-HID
0x5A	90	Z	Shift + 0x1D
0x5B	91	[0x2F
0x5C	92	\	0x31
0x5D	93]	0x30
0x5E	94	^	Shift + 0x23
0x5F	95	_	Shift + 0x2D
0x60	96	`	0x35
0x61	97	a	0x04
0x62	98	b	0x05
0x63	99	c	0x06
0x64	100	d	0x07
0x65	101	e	0x08
0x66	102	f	0x09
0x67	103	g	0x0A
0x68	104	h	0x0B
0x69	105	i	0x0C
0x6A	106	j	0x0D
0x6B	107	k	0x0E
0x6C	108	l	0x0F
0x6D	109	m	0x10
0x6E	110	n	0x11
0x6F	111	o	0x12
0x70	112	p	0x13
0x71	113	q	0x14
0x72	114	r	0x15
0x73	115	s	0x16
0x74	116	t	0x17
0x75	117	u	0x18
0x76	118	v	0x19
0x77	119	w	0x1A
0x78	120	x	0x1B
0x79	121	y	0x1C
0x7A	122	z	0x1D
0x7B	123	{	Shift + 0x2F
0x7C	124		Shift + 0x31
0x7D	125	}	Shift + 0x30
0x7E	126	~	Shift + 0x35
0x7F	127	Delete	0x4C

Appendix B - Troubleshooting

Problem	Possible Cause/Corrective Action
Unit does not power up when plugged into the PC USB port.	Try a different unit to verify that the cable and USB port are OK. If another unit powers up OK, return the unit for repair or replacement.
Unit powers up when plugged into the USB port but is not recognized by the system, ie. driver does not install.	This error should not occur when operating in USB HID mode. If this error occurs in USB Virtual COM mode, try using Windows Device Manager to update or reinstall the driver. The 'mchpcdc.inf' file may be required to help Windows locate the correct driver. If the unit still does not operate, contact Alpha Technologies.
Unit is connected to the PC, keys beep when pressed, but key presses are not detected by the host application.	Verify that the unit is setup for the correct USB mode, either USB-HID or USB Virtual COM, as required by the host application.
Display is difficult to see.	Use the Configuration program (Display Menu) or the embedded Setup Menu (see Appendix D) to check the display backlight and contrast settings.
Barcode Scanner not working.	Verify that the red scanner LED lights are present. If there are no red lights being emitted from the scanner opening, return the unit for repair or replacement. If light is present, unplug the unit and check the plastic lens for damage (cracks or scratches). Clean the lens with a soft microfiber cleaning cloth approved for lenses.
Beeper does not work.	Use the Configuration program (Display Menu) or the embedded Setup Menu (see Appendix D) to check the beeper volume settings.

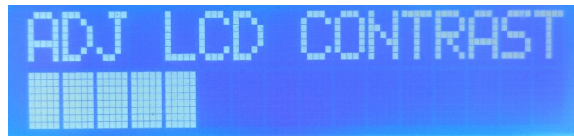
Appendix C - Technical Specifications

OS Support	Windows XP, 7, Vista, 8, 10
Power Requirements	5 VDC, 110mA (max), USB Bus Powered
USB Interface	USB 2.0/1.1 Full Speed
Keypad	15 Keys (3x5)
LCD Display	2 Line x 16 Character STN LCD Display with LED Backlight
LED Barcode Scanner	620nm Visible RED LED with CCD Image Sensor Code128, EAN-13, EAN-8, Code39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ISBN, Code 93, UCC/EAN-128, GS1 Databar
Physical Dimensions	17.1 x 9.5 x 3.5 cm, 6.75 x 3.75 x 1.375 in. (L x W x H)
Weight	255 grams (9 oz.) 370 grams (13 oz.) with Protective Boot
Operating Temperature	0~50 C, 32~125 F
Storage Temperature	-20~60 C, -5~140 F
Humidity	5-90%, non-condensing

Appendix D – Embedded Setup Menu

The AlphaTech device has an embedded setup menu that allows the user to check and modify the speaker and display settings without using the Configuration program. If you wish to activate the embedded setup menu, follow the steps below:

- Unplug the USB cable (the cable can be unplugged at either end, host computer or keypad).
- Press and hold down the “**F1**” key while plugging in the USB cable.
- Continue to hold the key down while the unit powers up. After several seconds you will hear a beep and you will see the following message appear on the LCD display. At this point you can release the key.



- Press the “**F2**” key to move through the parameter options. There are 4 parameters that the user can view or modify using this menu, LCD Display Contrast, LCD Display Backlight, Beeper Volume, and Beeper Pitch. Use the “**1**” and “**3**” keys to adjust the parameter up or down. When finished making changes, press the “**ENTER**” key to save the changes and exit the setup menu. You can also press the “**CLEAR**” key at any time to exit the setup menu without making any changes.

Warranty Information

Alpha Technologies products are warranted to be free from defects in material and workmanship for two (2) years from the date of delivery. This warranty does not cover any damage caused by abuse, misuse, tampering, misapplication or product modification on the part of the buyer or his agents. Alpha Technologies shall not be liable for installation charges, for expenses of the buyer for repairs or replacement, for damages from delay or loss of use, or other indirect or consequential damages of any kind. Devices that are found to defective and under warranty will be repaired or replaced at no charge to the buyer.

FCC Class B Regulatory Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.