

Braille Blazer

The Portable Embosser

Owner's Manual

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Introduction

The Braille Blazer is a portable Braille printer that lets you produce Braille documents, graphics, and labels. With Braille translation software on your computer, you can produce well-formatted Braille documents in Grade 2, Grade 1, or computer Braille. And with Braille graphics software, you can produce tactile diagrams and maps, as well as graphs of mathematical equations.

You can customize many of the Blazer's features through its various configuration menus. These menus are all audible through the Blazer's built-in speech synthesizer. In addition, the speech synthesizer can be used with screen access programs, even while the Blazer is Brailleing a document.

The Braille Blazer is very portable as it closes up into a compact, 12-pound case with a sturdy handle. Although you probably will not carry it around on the subway every day, it is small enough that you can run it across the street to your colleague's desk or carry it with you on your next airplane trip.

Getting Started

To produce Braille on the Braille Blazer, you need to connect the Blazer to a computer through either its serial or its parallel port, and use Braille translation software to translate your document for Braille.

Computer and Hardware

- If you want to use an IBM PC-compatible or Apple computer with your Blazer, use a standard serial or parallel cable to connect to the Blazer's serial or parallel port.
- If you want to use Freedom Scientific's own Braille 'n Speak with the Blazer's serial port, use the special serial cable that comes with the Braille 'n Speak to connect to the Blazer's serial port.
- If you want to use Freedom Scientific's Type 'n Speak 2000, Braille Lite 18, Braille Lite 40, or Braille Lite 2000 models, use either the special serial cable that comes with the device to connect to the Blazer's serial port, or use a standard parallel cable to connect to the Blazer's parallel port.
- If you want to use another device, such as a PocketBraille or a BrailleMate, use that device's serial cable to connect to the Blazer's serial port.

Braille Translation Software

Braille translation software converts a document that is formatted as a text file or formatted through a word processor into Grade 2 or Grade 1 Braille, then sends the converted document to a Braille printer. Some popular Braille translation programs include Duxbury System's Duxbury Braille Translator, MegaDots, and Freedom Scientific's own QuickBraille.

Braille Paper

The Blazer only works with fanfold paper, not single sheets. You can use standard 8-1/2 inch by 11-inch fanfold Braille

paper or any other smaller width fanfold paper. The Blazer works with Braille labels and index cards as long as they come in fanfold form. Contact us directly to find out what paper we sell at Freedom Scientific, or contact your local Braille paper dealer to see what sizes they offer.

Braille Speed of the Blazer

When Brailleing a document in Grade 2, Grade 1, or computer Braille with no graphics, the Blazer Brailles at 15 characters per second. But Brailleing sideways on the page or Brailleing graphics slows down embossing.

Using the Blazer as a Speech Synthesizer

Although you use the Blazer mainly to produce Braille, you can also use it as a speech synthesizer. In fact, you can run the Blazer as a speech synthesizer and as a Braille embosser at the same time.

To run the Blazer as a speech synthesizer, you need a screen access program that supports the Braille 'n Speak as a speech synthesizer. Most screen access programs have a driver for the Braille 'n Speak. So you should be able to direct your screen access program to work with the Blazer. Popular examples of screen access programs that support the Braille 'n Speak include ASAP, JAWS, and Vocal-Eyes. (Contact us directly, or check with your local adaptive technology vendor, for more information about screen access programs that support the Braille 'n Speak.)

To make the Blazer work as a speech synthesizer and still function as a Braille embosser at the same time, you need to establish both a parallel connection and a serial connection between the Blazer and your computer. You use the parallel connection to direct the Braille translation software to send documents to the Blazer through the parallel port on the computer. You use the serial connection to direct the screen access software to send speech to the Blazer's speaker through the serial port on your computer.

Touring the Blazer

The Blazer is a compact unit. We send it to you closed up into what looks much like a carrying case. Both the outside and inside are important. So we'll examine first the outside components. Then we'll lift up the lid and check out the inside.

The Outside of the Blazer

When you take the Braille Blazer out of the box for the first time, you can see how small and compact it is. It only weighs about 12 pounds and looks like a carrying case with a nice sturdy handle.

Notice the four rubber feet on the bottom of the Blazer. These feet prevent the Blazer from sliding around as it Brailles.

Set the Blazer on a flat surface with the handle facing away from you and the Braille labels on the top of the unit facing up.

First, let's check out the top of the Blazer. Starting from the front, the side closest to you run your hand along the top of the Blazer to the right side. Now move toward the back of the Blazer along the top right side. About halfway toward the back are three buttons. To the left of each button is a Braille label describing what each button does.

The button closest to you is labeled Form Feed. The next one back is labeled Line Feed, and the one furthest back is labeled On line. These buttons are very important because they help you move the paper in the Blazer and configure the unit to your particular needs.

Now slide your hand to the left side of the Blazer along the top of the machine. On the top left side about halfway back is a single curved button, a rocker switch, that lets you move the paper toward you or away from you. To the right of this button, a Braille label reads, Paper Advance.

Before we open the Blazer to check out its inside components, let's look at the back side of the Blazer. This is where all the connectors are located.

Run your hand over the top of the Blazer to the backside of the machine. The first thing you should notice is the handle that runs across the middle of the back of the Blazer. Just above the middle of the handle is the Blazer's speaker.

Now run your hand over to the lower right-hand corner of the back of the Blazer to find the On/Off rocker switch. To turn on the Blazer, rock the switch up toward you. To turn it off, rock the switch down away from you.

About an inch above the On/Off rocker switch, find a small rectangular hole with a small square button in it. This button is the voltage selector. For 120 volts, make sure the selector is in the Up position. Now feel to the left of the On/Off rocker switch to find the 3-pronged connector for the AC power cord.

A power cord should have come with your Blazer. The connector feels like the standard three-pronged connector on a computer or ink printer. Plug the female end of the power cord into this A.C. connector to power up your Blazer.

About an inch to the left of the AC power connector, find the parallel port that connects the Blazer to the parallel port on a computer, a Braille Lite, or a Type 'n Speak. You can use a standard Centronix parallel cable like the one you use to connect your computer to your parallel ink printer on the Blazer's parallel port. This port is the Centronix end of the connection. It feels like a rectangular opening with a smaller rectangular object within it. Use the clips on either side of the port to secure the parallel cable in place.

Continuing to the left of the parallel port, find the Blazer's serial port. This is a 25-pin, female port. It feels like a rectangular object with a bunch of tiny holes in it. A standard 25-pin, male serial cable connects to this port. The small screw holes on either side of the serial port help you secure the screws of the serial cable in place.

Finally, about half an inch to the left of the serial port, find the small 1/8th inch earphone jack. This earphone jack works with any standard RCA-style headphone connector so you can hear

the Blazer's voice with an earphone instead of through the Blazer's speaker.

The Inside of the Blazer

To lift up the Blazer's lid, simply find the front side of the machine and run your hands along the indentation for the cover. Gently lift and pull back the cover to expose the inside of the Blazer where you can load the paper and adjust the machine to Braille graphics. The cover should stay upright and rest comfortably along the top backside of the Blazer while we check out the inside.

Starting from the front side of the Blazer, the side closest to you first, notice the bar that runs across the width of the Blazer from left to right. This is the platen. It rests on a flat metal plate and is about an inch in from the front side of the Blazer.

Now run your hand along the platen all the way to the right and find a small rubber-coated knob along the back of the platen. This knob is used for adjusting the platen to Braille graphics. Right now, it's set so the Blazer can Braille a standard document. We'll check out how to adjust the platen for Braille graphics later.

About an inch behind the platen is the tractor mechanism that holds the paper in place.

Connecting the Blazer to Your Computer

The Blazer works with an IBM PC-compatible or Apple computer, a Braille 'n Speak, Braille Lite, or Type 'n Speak.

The Braille Lite, Type 'n Speak, and most computers let you print (or Braille) through a parallel connection, so the Blazer comes from the factory with the parallel port activated and the serial port off. But if you do need to use the Blazer's serial port to connect it to your Braille 'n Speak, or to a serial port on a computer, we'll show you how to do that, too.

Parallel Connection

You need a standard Centronix parallel cable like the one you use to connect your computer to an ink printer. The Centronix end of the cable has a rectangular housing with a long rectangular object on the inside of the housing.

It feels similar to the parallel port on the Blazer itself, which has a ridge around the rectangular opening where it mates with the housing of the Centronix connector.

The parallel port on the Blazer is located on the backside of the unit about an inch to the left of the AC power connector. Align the Centronix end of the parallel cord with the parallel port on the Blazer and gently push until the connector mates with the port. If the connector doesn't slide easily into the port, you may have the connector upside down. Turn it around and try again.

Once the cable is connected to the port, the connection should be snug. But to secure it, bring the clips on either side of the port in toward the connector until they click in place.

On the computer side of things, make sure you plug the male connector of the parallel cable into the female parallel port on the computer. If you're using a Braille Lite, or Type 'n Speak, its parallel port feels just like the parallel port on a computer. Computers like IBM PC-compatibles generally recognize parallel ports as LPT1, LPT2, etc.

As long as you direct the Braille translation software on your computer to transmit to the parallel port you're using for Braille documents, your Blazer and computer should communicate easily once the parallel connection is established.

Serial Connection

The serial connection is a little trickier because you may have to use an adapter to make the connectors match the ports both on the Blazer and on the computer. The end of the cable you need for the Blazer must be a 25-pin, male serial connector. Check whether the serial port on your computer is 25-pin or 9-pin. Either works with the Blazer. But you may need a gender bender or pin adapter on the computer side of the connection.

Find the serial port on the Blazer to the left of the parallel port. Align the 25-pin male serial connector with the serial port on the Blazer and gently push until they mate. The connector should slide in easily because it can only go into the port one way. So if you're having trouble, you may have the connector upside down. Turn it around and try again.

Once the serial connector is snugly connected to the serial port on the Blazer, you should secure it by tightening the finger screws on the connector (if it has them), or by using a small screwdriver to tighten the screws on either side of the connector.

If you want to connect a Braille 'n Speak, Braille Lite, or Type 'n Speak to the serial port on the Blazer, make sure to use the serial cable that came with your device. This cable is specifically designed to work with your unit and another serial device like the Blazer.

Whether you're transmitting a document from your computer or your Braille 'n Speak, Braille Lite, or Type 'n Speak to the Blazer, a serial connection needs some extra care beyond just cabling the devices together. Here we have to get a little technical, but don't worry about the terminology. What's important is that telecommunications settings on both ends of the connection have to match. In other words, the Blazer and

your computer have to be talking the same language, at the same rate of speed, and so on.

The Braille translation software you use to translate your documents into Grade 2 Braille should have some kind of printing facility. If the printing facility lets you configure your printer connection so you can use your computer's serial port instead of the more common parallel connection, the printing facility should also set telecommunications settings for you.

However, suppose you have documents that are already translated or that you don't want to translate into Grade 2, and you want to send them to your Blazer through a serial connection. You can use a telecommunications program on your computer to do the job.

Here are the settings you need to check:

Baud rate: 9600

Parity: None

Data bits: 8

Stop bits: 1

Handshaking: Software

If telecommunications settings match on your computer and the Blazer, everything should work without a hitch. Your Braille translation software should be able to send documents to the Blazer through the computer's serial port.

Likewise, using the Braille 'n Speak driver, your screen access software should be able to send speech to the Blazer's speaker through your computer's serial port. If you get garbage on the Blazer, or nothing at all, chances are the Baud rate is wrong on one end of the connection or some other setting is set incorrectly. Check the appendix for some possible solutions.

This is all you need to know to establish a connection between the Blazer and your computer. Next, let's see how to prepare the paper so you can be ready to Braille your first document.

Handling the Paper

To prepare the paper in the Blazer for Brailleing a document, you need to load the paper into the Blazer and align it to the top of the first page so that your text Brailles in the right place. Here's how it works.

Loading the Paper

You load paper into the Blazer from the front of the machine. Although this process wastes the first sheet of paper before Brailleing actually begins, it keeps the paper from jamming.

As we said earlier in this chapter, the Blazer accepts standard-size 8.5 by 11 inch fanfold Braille paper. Use heavyweight Braille paper, 100- pound tag, to produce sharper, durable Braille and use lighter weight paper for documents you don't need to keep for a long time. In addition, you can use paper narrower than 8.5 inches.

But we'll first look at how to load standard-size paper.

You can load paper into the Blazer whether the machine is on or off. Since this is our first time out, we'll start with the Blazer turned off.

First, lift the cover of the Blazer and find the tractor mechanism behind the platen. On either side of the tractor mechanism are the paper guides that hold the paper in place. Right now they are closed and locked at either end of the tractor mechanism so they can accept standard-size paper.

Now lift up the hinged covers of the paper guides. Notice that each paper guide has four pins. These pins are used to align the sprocket holes on the paper to the paper guides.

Starting from the front of the Blazer, slide the paper under the platen, over and past the pins of the paper guides, until the top edge of the paper is lying on the metal plate in back of the tractor mechanism.

If you need to straighten the paper, here's what to do. About two and a half inches from the left side of the Blazer on the metal piece where the paper is resting is a small square hole. This is the Top-of-Form sensor used by the Blazer to detect the top edge of the paper.

To straighten the paper, align its top edge to the front of the Top-of-Form sensor. This way, the sprocket holes on the paper easily fit onto the pins of the paper guides.

To make sure the paper is straight, count the sprocket holes on the paper that are behind the ones fitted onto the pins on the paper guides. The number of sprocket holes should be the same on either side of the paper.

Finally, to secure the paper in place, close the hinged covers of the paper guides and close the cover of the Blazer itself.

You're now ready to turn on the Blazer.

Loading Narrow Paper or Labels

To load paper narrower than 8.5 inch wide into the Blazer, you need to unlock one of the paper guides on the tractor mechanism and move it toward the other paper guide so that the distance between the two paper guides is the right width. Although you can unlock either paper guide, or both of them, we recommend that you only unlock the right one.

First lift the hinged covers of the paper guides as you would when loading standard-size paper. Starting from the front of the Blazer, slide the paper under the platen, over and past the pins of the left paper guide, until the top edge of the paper is lying on the metal plate in back of the tractor mechanism.

In fact, this is probably a good time to fit the sprocket holes on the left side of the paper into the pins on the left paper guide and close its cover. This way, one side of the paper is already secured in place.

Now reach over to the right paper guide and find the lever that's between the cover of the paper guide and the side of the Blazer itself. Push this lever away from you to unlock the paper guide

so you can move the paper guide in toward the right edge of the paper.

Gently lift the right edge of the paper and move the right paper guide toward it until the pins on the paper guide slide under the sprocket holes of the right side of the paper. Fit the sprocket holes of the paper onto the pins of the paper guide and close its cover. Then immediately push the lever that's just to the right of the paper guide toward you to lock the paper guide in place.

At this point, your paper should be secured in place on both sides. Make sure the paper is taut between the paper guides. You don't want any waffling at all because this will make the paper go crooked and jam in the Blazer. If the paper does seem to be crooked or you feel any looseness at all between the paper guides, unlock the right paper guide again and readjust it so that the paper lies flat between the paper guides. Once you're sure the paper is flat, close the cover of the paper guide and lock it back in place before doing anything else.

You're now ready to turn on the Blazer.

Setting Top of Form

The Blazer needs to know where the top edge of the paper is so it can begin Braille in the right place. When you first turn it on, the Blazer moves the paper back and forth a bit to adjust it but it's still a good idea to set Top of Form manually to insure your Braille pages come out the way they should. Here's how it works.

To turn on the Blazer, find the On/Off rocker switch on the right side of the back of the machine and rock the switch up toward you. Within a couple of seconds, you should hear the paper move slightly and the Blazer say, "Braille Blazer ready."

Now find the three keys midway along the right side of the top of the Blazer. From front to back, these keys are labeled, "form feed", "line feed", and "on line."

To set Top of Form, press the "form feed" key together with the "on line" key. The Blazer says, "Set top of form" as it moves the

paper back and forth to align to the Top-of-Form sensor we talked about earlier. And you'll feel part of the first page come out the back of the Blazer between the back of the Blazer's cover and the back side of the machine itself. This is the sheet that has to be wasted so the paper won't jam in the Blazer.

Setting the Top Margin

Where Braille actually begins on each page depends on how you have your top margin set from within your word processor or Braille translation software.

If you have your top margin set to 0, the Blazer assumes you want it to start Braille immediately below the perforation. Usually, this also means that you've set a page length of 27, the maximum number of lines that can fit on a standard Braille page.

If you want the Blazer to start Braille one line below the perforation, you need to set your top margin to 1 in your word processor or Braille translation software. And you should probably set your page length to 25. This way, the Blazer will give you top and bottom margins of 1 on each Braille page.

Brailleing a File

To send a file from your computer to the Blazer, you must make sure your file is ready for Brailleing, not printing, you must make sure the Blazer is ready to receive your file, and that it knows where the top edge of the page is, and so on.

And of course, when the Blazer finishes Brailleing your file, you must tear off the set of sheets it Brailled the right way so the Blazer can receive more files to Braille. Here's how to go about it.

Preparing a File for Brailleing

In order to Braille a file on the Blazer, you must issue the appropriate command from your word processor or Braille translator that transmits the contents of your file to the Blazer. We can't spend time here explaining how to do this because each word processor and Braille translator has its own set of commands. But here are some important things to keep in mind before you try to Braille a file.

If you want the Blazer to Braille your document in Grade 2 Braille, you must run it through your Braille translator's Grade 2 Braille translation and formatting procedures. This may include telling the translator what margins you want, what page length and line width to use, and so on.

If you don't run your file through a Braille translator, the Blazer Brailles the file in computer Braille because it doesn't know the difference among computer Braille, Grade 1 Braille, and Grade 2 Braille.

This may be just what you want it to do (especially if the text you're Brailleing is programming code). But unless you specify a page length and line width that works with the size Braille paper you're using, your word processor assumes you're printing, not Brailleing, and therefore formats pages using print formatting parameters. So the outcome in Braille may be quite a mess.

Make sure your text is really ready for Braille before you issue the command on your computer that tells the Blazer to start Braille. Also, you must make sure the Blazer is ready to receive data.

Preparing the Blazer to Receive a File

When you first turn on the Blazer and set Top of Form, it's ready to receive a file. So when you do issue the command that tells the Blazer to begin Braille, it should start right away. If it doesn't start Braille, it may be "off line." In other words, it may not be ready to receive data.

Find the "on line" key on the right side of the top of the Blazer. It's the rearmost key of the set of three we've mentioned before. When you press this key, the Blazer says either, "on line" or "off line." When the Blazer is "on line", it's ready to receive data.

But when it's "off line", it can't receive any data at all. Press the "on line" key to make the Blazer be able to receive data again.

The "on line" key is also useful if you want to stop the Blazer from Braille the file you just sent to it - for example, if you realize it's the wrong file or that you didn't run the Braille translator on the file yet.

Braille a Different File

Suppose you decide not to finish Braille the file you sent to the Blazer because it's the wrong file or because you forgot to run it through the Braille translator before you sent it to the Blazer.

The first thing to do is to take the Blazer "off line" by pressing the "on line" key once. The Blazer should stop Braille immediately. In addition, you may have to issue some type of Cancel command from within your word processor to stop transmitting data from your computer to the Blazer, but even that may not be enough.

The Blazer holds several pages worth of information in its memory buffer at one time. So if it still has part of the file in its

buffer when you take it "off line", it will resume Braille that data the instant you press the "on line" key again.

Your safest way to clear the Blazer's buffer is simply to press the three keys on the right side of the top of the Blazer simultaneously. This puts you into menu mode and clears the Blazer's print buffer. To return to printing mode, press the three keys all together again.

Looking at the Last Page

Sometimes, you may want to see what's on the last page before removing it from the Blazer or before sending another file to the Blazer for it to Braille. Here's how you can check out what's on the last page of your file without taking it out of the Blazer.

Find the key labeled "line feed." This is the middle key of the three keys midway along the right side of the top of the Blazer. Every time you press the "line feed" key, the paper moves one line out the back of the machine. As you continue to press the "line feed" key, more of the last page that was Brailled emerges for you to read.

Once you're satisfied about what's on this page, you can remove the set of sheets altogether (see next section) or you can reset Top of Form so the Blazer is ready to receive another file. This is one way to reduce wasting a sheet of paper because the Blazer will start Braille your next file on the very next blank page; whereas, if you tear off the last Brailled page, the Blazer wastes a sheet and starts Braille on the second page.

Removing the Paper

Once the Blazer finishes Braille your file, you may want to Braille another file right away or remove the current set of sheets from the Blazer. Depending on how your word processor or Braille translator works, the last page of your file may still be partially under the Blazer's cover. So you may need to move this page out manually. There are a couple of ways to do this.

One way to move the last page the Blazer Brailled out from under the Blazer's cover is to press the "form feed" key. This is the key closest to you on the keypad on the right side of the top of the Blazer. Pressing the "form feed" key pulls the paper that's under the Blazer's cover out toward the back of the machine, but Top of Form is retained. So you won't have to set Top of Form again for the next file you want to Braille.

At this point, you can go ahead and send another file to the Blazer or remove the set of sheets that contains the current file from the Blazer by tearing off the last page from the back of the machine. If you do this, though, remember that the Blazer wastes the next sheet to keep the paper from jamming in the Blazer.

A second way to move the last page the Blazer last Brailled from under the Blazer's cover is to use the key labeled "paper advance." This curved, rocker-like key is midway on the left side of the top of the Blazer.

To pull the paper out toward the back of the Blazer, hold down the back end of the "paper advance" key, that is, the part of the key closest to the back of the Blazer. The last page of your file slowly begins to emerge from the back of the Blazer. Once you feel the perforation between this page and the next one, release the "paper advance" key.

At this point, you can remove the set of sheets from the Blazer by tearing off the last page of your file.

However, the Blazer doesn't know you moved the paper because you pulled it out without issuing a "form feed." In other words, the Blazer can't remember on what line it stopped Brailing. So you need to issue another Top of Form so the Blazer can find the top of the page again. To do this, press the "form feed" key together with the "on line" key. As before, the Blazer moves the paper back and forth a bit until it senses the top of the page, then says, "Set top of form."

You're now ready to send another file to the Blazer.

Customizing your Blazer

Introduction

To change the Blazer's settings, you use its configuration menus. There are five menus of settings you can alter: Speech, Printer, Sideways, and Service.

You may not need to change any of the Blazer's default settings but if you do, this chapter explains how to do things like telling the Blazer which port to use for printing, whether to activate the speech synthesizer, and that you want to print your document sideways on the page.

We'll explore each configuration menu in detail in separate sections.

Printing Mode and Menu Mode

The Blazer has two modes of operation: printing mode and menu mode. Most of the time, you're in printing mode, which means the Blazer is ready to print a document. When you are in menu mode, the Blazer is ready to accept your changes to its settings for a variety of things, like its ports, its built-in speech synthesizer, and its formatting parameters.

It's quite simple to flip between printing mode and menu mode. Find the three-key keypad on the right side of the top of the Blazer. Press all three keys simultaneously to toggle from one mode to the other.

In other words, if you are in printing mode, pressing the three keys at the same time puts you into menu mode. If you are in menu mode, pressing the three keys at the same time returns you to printing mode.

Ordinarily, when you're in the Blazer's menu mode, you get feedback from the Blazer's built-in speech synthesizer. If you also want feedback in Braille as you work through the configuration menus, enter menu mode in the following way:

Press the rocker switch on the left side of the top of the Blazer toward you. While holding down the rocker switch, press the three keys on the right side of the top of the Blazer at the same time. Then release the rocker switch.

This key sequence causes the Blazer to Braille as well as speak feedback to you. Whether the Blazer responds to you with a message or a prompt, it moves the paper out far enough so you can read its response, then moves the paper back into the machine so it can Braille its next response.

Configuration Menus

The Blazer has five configuration menus. Each menu is independent of all the other menus. So changing the settings in one menu does not affect the settings in any other menu.

Here is what each of the menus does:

- Speech Configuration menu - Lets you change which port the Blazer uses to interface its built-in speech synthesizer with a computer. This menu also lets you change the Blazer's speech synthesizer's pitch, voice rate, etc.
- Printer Configuration menu - Lets you change which port the Blazer uses to interface with a computer in order to print. This menu also lets you change the Blazer's formatting parameters like page length, left and top margins, etc.
- Sideway Printer Configuration menu - Lets you set the Blazer to "landscape" (sideways printing) mode.
- Serial configuration menu - Lets you change the telecommunications parameters on the Blazer's serial port, like Baud rate, data bits, stop bits, etc.

Service Configuration menu - Lets you perform diagnostic tests on the Blazer for troubleshooting problems.

Navigating the Configuration Menus

You navigate through the configuration menus with the keypad on the right side of the top of the Blazer. Here's how it works. When you press the three keys on the right side of the top of

the Blazer simultaneously to enter menu mode, the three keys take on different functions from what they do while you're in printing mode. The key labeled Formfeed is now your Enter key for entering a configuration menu and for cycling through its choices.

The key labeled Linefeed is now your "Skip" key for moving forward to another configuration menu or to another choice within a configuration menu.

The key labeled Online is now your "Back-up" key for moving backward to another the configuration menu or to another choice within a configuration menu.

Pressing the three keys simultaneously twice from within a configuration menu kicks you back out of menu mode into printing mode.

You don't have to listen to an entire prompt or message from the Blazer before issuing another command. If you press a key sequence while the Blazer is speaking a prompt or message, it simply jumps to speaking its next prompt or message.

Here's how to move through the menus while you're in menu mode:

When you first enter menu mode, The Blazer says, "Configuration: Speech config." At this point, you can press either Enter (the key) closest to you, to hear this menu's choices, or you can press Skip(the middle key) to hear the name of the next configuration menu, "Printer config."

Press Skip repeatedly to move to "Sideway printer config", "Serial config", "Service menu", and "Exit." When you hear "Exit", the Blazer automatically kicks you out of menu mode and is once again in printing mode. If you want to exit menu mode without moving to the "Exit" choice, simply press all three keys together from anywhere within a configuration menu, then again to exit menu mode altogether.

By the way, whenever you exit menu mode, the Blazer resets top of form.

Once you're pointing to a particular configuration menu, here's what you can do:

- View a menu's choices by pressing Enter (the key closest to you).
- Move forward through a menu's choices by pressing Skip (the middle key).
- Move backward through a menu's choices by pressing Back-up (the key furthest away from you).
- Change how a setting is set by pressing enter (the key closest to you).

Your changes only take effect when you move to another setting, move to another menu, or exit menu mode altogether.

Speech Configuration Menu

The Speech Configuration menu lets you change how the Blazer's speech synthesizer sounds. You can change the synthesizer's volume, speech rate, pitch, and more. Here's how it works.

Enter the Speech Configuration menu by pressing the three keys on the right side of the top of the Blazer at the same time. The Blazer says, "Configuration: Speech config." Press Enter (the key closest to you) to navigate through the menu.

At this point, you can do the following:

- Press Skip to move forward through the Speech Configuration menu's settings.
- Press Back (the key furthest away from you) to move backward through the Speech Configuration menu's settings.
- Press Enter repeatedly to cycle through a setting's choices.

Any change you make to a setting takes effect when you move to another setting, move to another menu, or exit menu mode altogether.

Changing the Port

When you enter the Speech configuration menu, the first setting you can change is the Port. Whichever port is active, anything coming into it from a computer or a notetaker is spoken by the Blazer's built-in speech synthesizer when the Blazer is in printing mode.

So for example, suppose the parallel port is active from within the Speech Configuration menu. If you send a document from your computer to the Blazer's parallel port for Braille, the Blazer will speak the contents of the document. Whether it also Brailles the document depends on whether the parallel port is active from within the Printer Configuration menu.

Since the factory default has the Blazer's serial port active from within the Speech Configuration menu, if you send a document from your computer to the Blazer's parallel port, the Blazer should not speak the contents of the document.

When you enter the Speech configuration menu, the Blazer says, "Port, serial."

To change this setting, cycle through its options by pressing Enter. The options are: "Off", "Parallel", and "Serial." "Off" turns off Both the serial and parallel ports. "Parallel" activates the parallel port. And of course, "Serial" reactivates the serial port. Your choice is automatically selected once you move to another setting within this menu, move to another menu, or exit menu mode altogether.

Changing How Numbers are Spoken

Enter the Speech configuration menu. Press Skip once to move to the "Numbers" setting. The Blazer should say, "Numbers, full numbers", which is the default. This means that the Blazer will say 2000 as "two thousand."

Since the only two options for this setting are "Full numbers" and "Digits", you can toggle between them by pressing Enter.

Changing How Much Punctuation is Spoken

Enter the Speech configuration menu. Press Skip twice to move to the Punctuation setting. You should hear the Blazer say, "Punctuation, Some", which is the default. This means that the Blazer says only some punctuation as it speaks.

To change this setting, cycle through its options by pressing Enter. The options are, "Some", "Most", and "total." Your choice is automatically selected once you move to another setting within this menu, move to another menu, or exit menu mode altogether.

Changing Voice Inflection

Enter the Speech configuration menu. Press Skip until you hear the Blazer say, "voice inflection, off", which is the default. This means that the Blazer's speech synthesizer speaks in a robotic voice.

Since this setting only has two options, you can toggle between them by pressing Enter. "Off" makes the Blazer's speech synthesizer sound more robotic. "On" makes it rise and fall more naturally as it speaks.

Changing Speech Rate

Enter the Speech configuration menu. There are two speech rate settings you can change: faster and slower. Move to the speech rate settings by pressing Skip until you hear either "Speed faster" or "Speed slower." Once you're pointing either to "Speed faster" or to "Speed slower",

you can change the Blazer's speech rate by pressing Enter repeatedly. Each time you press Enter, The Blazer says the word "Faster" or "Slower" at a faster or slower rate. Once you hear the rate you want, exit menu mode or press the Skip or Back-up key to work with another setting.

Changing the Pitch

Enter the Speech configuration menu. There are two pitch settings you can change: higher and lower. Move to the Pitch

settings by pressing Skip until you hear either "Pitch higher" or "Pitch lower." Once you're pointing either to "Pitch higher" or to "Pitch lower", you can change the Blazer's pitch by pressing Enter repeatedly. Each time you press Enter, The Blazer says the word "Higher" or "Lower" at a higher or lower pitch. Once you hear the pitch you want, exit menu mode or press the Skip or Back-up key to work with another setting.

Changing the Volume

Enter the Speech configuration menu. There are two volume settings you can change: louder and softer. Move to the volume settings by pressing Skip until you hear either "Volume louder" or "Volume softer."

Once you're pointing either to "Volume louder" or to "Volume softer", you can change the Blazer's volume by pressing Enter repeatedly. Each time you press Enter, The Blazer says the word "Louder" or "Softer" in a louder or softer voice. Once you hear the volume you want, exit menu mode or press the Skip or Back-up key to work with another setting.

Changing the Tone of the Voice

Enter the Speech configuration menu. There are two tone settings you can change: higher and lower. Move to the tone settings by pressing Skip until you hear either "Voice higher" or "Voice lower." Once you're pointing either to "voice higher" or to "Voice lower", you can change the Blazer's tone by pressing Enter repeatedly. Each time you press Enter, The Blazer says the word "Higher" or "Lower" in a higher or lower voice. Once you hear the tone you want, exit menu mode or press the Skip or Back-up key to work with another setting.

Printer Configuration Menu

The Printer Configuration menu lets you change settings related to the printing of your documents. For example, it lets you change which port accepts the transmission of your document from your computer, tell the Blazer what paper weight you have in the Blazer, and much more. Here's how it works.

Enter the Printer Configuration menu by pressing the three keys on the right side of the top of the Blazer at the same time. The Blazer says, "Configuration: Speech config."

Now press Skip (the middle key) to bypass the Speech Configuration menu and hear, "Printer config." Press Enter to move through the menu's settings.

At this point, you can do the following:

- Press Skip to move forward through the Printer Configuration menu's settings.
- Press Back (the key furthest away from you) to move backward through the Printer Configuration menu's settings.
- Press Enter repeatedly to cycle through a setting's choices.

Any change you make to a setting takes effect when you move to another setting, move to another menu, or exit menu mode altogether.

Changing the Port

When you enter the Printer configuration menu, the first setting you can change is the Port. Whichever port is active, anything coming into it from a computer or a notetaker is printed by the Blazer while the Blazer is in printing mode..

Since the factory default has the Blazer's parallel port active, when you enter the Printer Configuration menu, the Blazer says, "Port, parallel active."

To change this setting, cycle through its options by pressing Enter. The options are: "Parallel", "Serial", and "Off." "Parallel" is the default. "Serial" activates the serial port. "Off" turns off both the serial and the parallel ports. Your choice is automatically selected once you move to another setting within this menu, move to another menu, or exit menu mode altogether.

Changing the Direction of Paper Feed

Enter the Printer configuration menu. Press Skip once to move to the "Paper feed" setting. The Blazer should say, "Paper feed, pulling active", which is the default. This means that the Blazer will pull the paper from the front of the Blazer toward the back. This is the preferred direction for feeding paper through the Blazer to prevent the paper from jamming.

However, if you want to try saving paper, you can avoid wasting the first sheet of paper that is fed through the Blazer by reversing the direction of paper feed.

Since the only two options for Paper Feed are "Pulling" and "Push out", you can toggle between them by pressing Enter.

Adjusting the Margins

The next four settings on the Printer Configuration menu are for adjusting the margins. Although this menu lets you adjust the left, right, and top margins of your document on the Blazer, it no longer lets you adjust the bottom margin.

It's usually better to adjust margins from within your word processor. But if you do want to adjust the margins from the Blazer side of things, here's how it works.

When you enter the Printer Configuration menu, navigate to the margin setting you want to adjust by pressing Skip (the middle key) and Back (the key furthest away from you) until you arrive at your choice. Then press Enter to cycle through that setting's options. Your change takes effect when you move to another setting, move to another menu, or exit menu mode altogether.

Setting the left margin: When you enter the Printer Configuration menu, press Skip twice to arrive at the first of the margin settings, Left Margin. The Blazer says, "Left margin 0, active", which is the default. This is literally the left edge of the paper.

To change the left margin, press Enter. The Blazer lets you adjust the left margin up to 10 spaces from the left edge of the paper before it cycles you back to 0.

Setting the right margin: When you enter the Printer Configuration menu, press Skip three times to arrive at the Right Margin setting. The Blazer says, "Right margin 34, active", which is the default. This is literally the right edge of the paper since the largest paper width the Blazer can accept is 8-1/2 inches.

Your choice is activated when you move to another menu or exit menu mode altogether.

To change the right margin, press Enter. The Blazer lets you adjust the right margin down to 28 (in other words, 6 spaces from the right edge of the paper) before it cycles you back to 34.

Setting the top margin: When you enter the Printer Configuration menu, press Skip four times to arrive at the Top Margin setting. The Blazer says, "Top margin 0, active", which is the default. This is literally the top edge of the paper.

To change the top margin, press Enter. The Blazer lets you adjust the top margin up to 10 lines from the top edge of the paper before it cycles you back to 0.

Setting the bottom margin: As stated earlier, the bottom margin setting is now disabled. You cannot adjust it, but it is a setting that you can bypass by pressing the Skip key repeatedly.

Changing the Lines Per Page

You can adjust how many lines are Brailled on any given page from the Blazer.

When you enter the Printer Configuration menu, press Skip six times to arrive at the Lines per Page setting. The Blazer says, "Lines per page 25, active", which is the default since this is the standard for an 11-inch page.

To change the lines per page, press Enter. The Blazer lets you cycle from 22 to 30 lines per page.

Changing Page Length

Since the Blazer can accommodate a variety of page lengths, you can adjust the page length on the Blazer through the Printer Configuration menu.

When you enter the Printer Configuration menu, press Skip seven times to arrive at the Page Length setting. The Blazer says, "Page length 11, active", which is the default since the standard page length is 11 inches.

To change the page length, press Enter. The Blazer lets you cycle through lengths ranging up to 12 inches and down to 1 inch.

Here are the actual increments, starting from the default value of 11 inches.

11.5, 12, 1, 1.5, 1.75, 2, 2.5, 3, 4, 5, 6, 7, 8, 8.5, 9, 9.5, 10, 10.5.

The smaller lengths can be used for making Braille labels. The middle lengths might be best for index cards. And the longer lengths serve well for more text-intensive documents like class notes or letters.

Changing Word Wrap

The term "word wrap" refers to a computer's ability to detect when it's coming to the end of a line so that it can determine whether to "wrap" to a new line if the word you just typed is too long to fit on the current line. Generally, this feature is controlled from your word processor. But you can also control it from the Blazer.

When you enter the Printer Configuration menu, press skip eight times to arrive at the Word Wrap setting. The Blazer says, "Word wrap on, active", which is the default.

If you do want to turn word wrap off, as when Brailleing out computer programming code, for example, simply press Enter.

Changing the Weight of the Paper

The Blazer can Braille on heavyweight and lightweight Braille paper. It's important to set the Blazer for the correct paper weight to avoid tearing lighter paper or producing faded Braille on heavier paper.

When you enter the Printer Configuration menu, press Skip nine times to arrive at the Paper Weight setting. The Blazer says, "Paper weight heavy, active", which is the default for standard 100-pound tag Braille paper.

To change the paper weight, press Enter. The Blazer lets you cycle through Plastic and Light before cycling you back to Heavy. The Plastic option is for Braille on plastic labels or thermoform paper.

Changing the Braille Language

The Blazer understands how to Braille in a wide variety of languages. Of course, you must also since you have to produce the text on your word processor.

When you enter the Printer Configuration menu, press Skip ten times to arrive at the Character Set setting. The Blazer says, "Character set U.S. ASCII, active", which is the default. In most cases, you'll want to keep it this way. Without getting technical, let's just say that ASCII is the standard alphabet, punctuation marks, and numbers you already know.

However, if you do want to use another character set, press Enter. The Blazer lets you cycle through the following options before cycling you back to U.S. ASCII:

Spanish, Japanese, French, French-Canadian, German, Brazilian Portuguese, Danish, and Slovak.

Needless to say, you'd better be familiar with the Braille produced by those languages, or you'll be very surprised when you Braille your next document.

Checking the Status of Paper-Out Detection

You're most likely to use the "Paper-out Detection" setting to check whether it's on or off. It's best to keep it turned on all the time so the Blazer can let you know when it thinks it's out of paper.

When you enter the Printer Configuration menu, press Skip eleven times to arrive at the Paper-out Detection setting. The Blazer says, "Paper-out detector on, active", which is the default. Should you want to turn it off for some reason, simply press Enter.

Checking the Status of Auto-Linefeed

You're most likely to use the "Auto Linefeed" setting to check whether it's on or off. It's best to keep it turned off all the time since your Braille translator's printing facility should be able to send linefeed characters properly to your Blazer.

However, if you do need the Blazer to detect whether it's receiving linefeed characters, here's what to do.

When you enter the Printer Configuration menu, press Skip twelve times to arrive at the Auto linefeed" setting. The Blazer says, "Auto linefeed off, active", which is the default. Should you want to turn it on, simply press Enter.

Changing whether control characters are Brailled

You're most likely to use the "Print Control Characters" setting to check whether your formatting parameters are being transmitted properly from your Braille translator's printing facility.

It's best to keep it turned off all the time so the Blazer doesn't Braille strange-looking characters (like dot 4 m for a carriage return).

However, if you do need to print control characters from the Blazer, here's what to do.

When you enter the Printer Configuration menu, press Skip thirteen times to arrive at the Print Control Characters setting.

The Blazer says, "Print control characters off, active", which is the default. Should you want to turn it on, simply press Enter.

Selecting 6- or 8-dot Braille

You're most likely to use "8-dot Braille" if you're accustomed to reading it. To most of us, 6-dot Braille is the norm.

However, if you do want to Braille using 8-dot characters, as many Europeans are familiar with, here's what to do.

When you enter the Printer Configuration menu, press Skip fourteen times to arrive at the setting for 6- and 8-dot Braille. The Blazer says, "Braille 6-dot, active", which is the default. Should you want to switch to 8-dot Braille, simply press Enter.

Selecting Label Mode

If you want to Braille labels with the Blazer, you need to turn on Label mode.

When you enter the Printer Configuration menu, press Skip fifteen times to arrive at the Label Mode setting. The Blazer says, "Label mode off, active", which is the default. Should you want to turn it on, simply press Enter.

Sideway Print Configuration Menu

The Sideway Print Configuration menu, as its name implies, lets you Braille sideways. In other words, the orientation of your document will BE "landscape" rather than "portrait" so that text or graphics will appear Brailled with the long side of the page being right side up rather than the short side.

The Sideway Print Configuration menu has three settings you can toggle on and off: whether the Blazer Brailles sideways or not, whether the Blazer Brailles multiple spaces or not, and whether the Blazer skips blank lines or not. Here's how it works.

Enter the sideway Print Configuration menu by pressing the three keys on the right side of the top of the Blazer at the same time. The Blazer says, "Configuration: Speech config." Now

press Skip (the middle key) twice to bypass the Speech Configuration menu and the Printer Configuration menu.

You'll hear, "Sideway Print config." Press Enter to move through the menu's settings.

At this point, you can do the following:

- Press Skip to move forward through the Sideway Print Configuration menu's settings.
- Press Back (the key furthest away from you) to move backward through the Sideway Print Configuration menu's settings.
- Press Enter to cycle through a setting's choices.

Any change you make to a setting takes effect when you move to another setting, move to another menu, or exit menu mode altogether.

Selecting Sideway Print

If you want the Blazer to Braille sideways on the page, you must turn on Sideway print and flip the platen bar. Here's what to do.

When you enter the Sideway Print Configuration menu, the Blazer says, "Sideways print off, active", which is the default. To turn it on, press Enter.

Now open the cover of the Blazer and feel for the rubber knob on the back right side of the platen bar. Lift up and flip the bar completely around so that the rubber knob is facing toward you and the platen bar is once again lying flat against the paper.

When you exit menu mode, the Blazer will be ready to receive a document formatted for landscape Braille. When you're ready to resume Braille documents in a portrait orientation, remember to turn sideways print off again and flip the platen bar back to its original position with the rubber knob to the backside of the platen bar.

Suppressing Multiple Spaces

If you want to Braille a document that was originally formatted for print, it probably has multiple spaces in it. That is, it may have paragraphs with their first lines indented by five spaces, each sentence separated by two spaces, and so on.

Your Braille translation software should strip out most of these extra spaces before your document ever goes to the Blazer. But in case it misses any, you can ensure the Blazer catches them all by turning on the "Suppress Multiple Spaces" setting.

When you enter the Sideway Print Configuration menu, press skip once to arrive at the Suppress Multiple Spaces setting. The Blazer says, "Suppress multiple spaces off, active", which is the default. To turn it on, simply press Enter.

Skipping Blank Lines

If you want to Braille a document that was originally formatted for print, it probably has extra blank lines in it to create "white space", which makes the document more legible for sighted readers. Your Braille translation software should strip out all of these extra blank lines before your document ever goes to the Blazer. But in case it misses any, you can ensure the Blazer catches them all by turning on the Skip Blank Lines setting.

When you enter the Sideway Print Configuration menu, press skip twice to arrive at the Skip blank Lines setting. The Blazer says, "Skip blank lines off, active", which is the default. To turn it on, simply press Enter.

Serial Configuration Menu

You can use the Blazer's serial port to connect to your computer, Braille n speak, Type n Speak, or Braille lite. You can use the serial connection either to transmit documents from a device to the Blazer for Braille, or to use the Blazer's built-in speech synthesizer with a screen access program.

In either case, the telecommunications settings on the Blazer's serial port must exactly match those on the other device in

order to work properly. This can seem a bit technical at first, but we'll keep it as simple as possible.

The Serial Configuration menu on the Blazer has many telecommunications settings you can adjust so that your connection runs smoothly. You'll need to check the documentation for the device you're connecting to the Blazer through its serial port to find out how it expects telecommunications settings to be set.

The most critical ones are Baud rate, data bits, stop bits, parity, and handshaking. You don't have to understand what these terms mean, just how to make sure the settings match on both ends of the connection.

Enter the Serial Configuration menu by pressing the three keys on the right side of the top of the Blazer at the same time. The Blazer says, "Configuration: Speech config." Now press Skip (the middle key) three to bypass the Speech Configuration menu, the Printer Configuration menu, and the Sideway Print Configuration menu. You'll finally arrive at, "Serial config." Press Enter to move through the menu's settings.

At this point, you can do the following:

- Press Skip to move forward through the Serial Configuration menu's settings.
- Press Back (the key furthest away from you) to move backward through the Serial Configuration menu's settings.
- Press Enter repeatedly to cycle through a setting's choices.

Any change you make to a setting takes effect when you move to another setting, move to another menu, or exit menu mode altogether.

Changing the Baud Rate

The Baud rate is the speed at which data travels between your device and the Blazer through its serial connection. It's only important that both devices are talking at the same rate of

speed. Generally, computers (and even our Blazie notetakers) are set at 9600 Baud.

When you enter the Serial Configuration menu, the Blazer says, "Baud rate 9600, active", which is the default. Generally, you'll want to leave it at 9600 since it's the fastest speed the Blazer can handle and since most devices use 9600 as a default.

However, if you do need to change this setting, cycle through its options by pressing Enter. The Blazer lets you cycle through 75, 150, 300, 600, 1200, 2400, and 4800 before cycling you back to 9600.

Changing Data Bits

Without getting too technical, data bits per character is the setting that controls what types of characters can be transmitted to the Blazer. The only two options here are 8, which is the default, and 7. Generally speaking, you'll only need to change data bits to 7 if the transmission requires Even parity.

When you enter the Serial Configuration menu, press Skip once to arrive at the Bits Per Character setting. The Blazer says, "Bits per character 8, active", which is the default. To change data bits to 7, press Enter.

Changing Stop Bits

The only two options for stop bits are 1, which is the default, and 2. Generally speaking, you'll want to keep it at 1. But if you need to change it, here's what to do.

When you enter the Serial Configuration menu, press Skip twice to arrive at the Stop Bits setting. The Blazer says, "Stop bits 1, active", which is the default. To change stop bits to 2, press Enter.

Changing Parity

Without getting too technical, parity works together with data bits per character. Generally, if bits per character is set to 8, which is the default, parity is set to None, which is its default. But if you need to change parity, here's what to do.

When you enter the Serial Configuration menu, press Skip three times to arrive at the Parity setting. The Blazer says, "Parity none, active", which is the default. To cycle through its options, press Enter. The Blazer lets you cycle through Odd and Even before it cycles you back to None.

Changing Handshake

Without getting too technical, handshake acts rather like a traffic cop, making sure data transmits smoothly from one device to another. If you do need to change handshake to match another device to the Blazer, here's what to do.

When you enter the Serial Configuration menu, press Skip four times to arrive at the Handshake setting. The Blazer says, "Handshake software, active", which is the default. To cycle through its options, press Enter. The Blazer lets you cycle through None and Hardware before cycling you back to Software handshake.

Service Menu

The Service menu is really for the techies. It has many options that most users won't care about at all. So in this section, we'll only cover four fundamental options you might want to use: printing out the Blazer's manual, testing whether the Blazer is Brailleing properly, checking the Blazer's serial number, and finding out the Blazer's software revision date. The rest of the Service menu options are explained in detail in the Blazer's Service Manual. Call Blazie Engineering if you need a copy.

Printing out the Blazer's Manual

The Blazer's manual is stored within its built-in ROM (read-only memory). If your Blazer was shipped to you before November 1997, its built-in manual will differ significantly from the one you're reading right now. To avoid confusion, we suggest you use only the one you're reading right now as a reference.

But if your Blazer is up-to-date and you lose this manual or need extra copies of it, you can have the Blazer print them out for you. Here's how:

Enter menu mode by pressing the three keys on the top side of the Blazer simultaneously, the Blazer says, "Configuration, Speech config." Press the Skip key (the middle key) four times to arrive at the Service menu. The Blazer says, "Service menu."

To print the Blazer's built-in manual, which is the first option on the Service menu, do the following: press Enter (the key closest to you) once to hear the Blazer say, "Print manual?", then a second time to begin printing. The manual comes out in properly formatted, Grade 2 Braille.

To exit menu mode, press the three keys on the right side of the Blazer simultaneously. The Blazer says, "Exit." You're now back in printing mode, ready to continue Brailleing your own documents.

Testing the Braille Blazer

You can test the Blazer to check whether it's Brailleing properly. Here's how:

Enter menu mode by pressing the three keys on the right side of the Blazer simultaneously, the Blazer says, "Configuration, Speech config." Press Skip (the middle key) four times to arrive at the Service menu. The Blazer says, "Service menu."

Move directly to the option for testing whether the Blazer is Brailleing properly, as follows. First, press Enter (the key closest to you). The Blazer says, "Print manual?" Since we want to bypass this option, press skip once to arrive at, "Print test." To run the test, press Enter. The Blazer Brailles a single page of text that provides a brief overview of the capabilities of the Blazer.

To exit menu mode, press the three keys on the right side of the Blazer simultaneously. The Blazer says, "Exit." You're now back in printing mode, ready to continue Brailleing your own documents.

Checking Your Serial Number

Each Blazer comes with its own unique serial number. If you need to find out exactly what this number is to identify your machine to Blazie, for example, here's what to do.

Enter menu mode by pressing the three keys on the right side of the Blazer simultaneously, the Blazer says, "Configuration, Speech config." Press Skip (the middle key) four times to arrive at the Service menu.

The Blazer says, "Service menu." Move directly to the option that states your serial number, as follows. First, press Enter (the key closest to you). The Blazer says, "Print manual?" Since we want to bypass this option, press skip twelve times to arrive at, "Serial number xxxxx", where xxxxx is your specific serial number.

To exit menu mode, press the three keys on the right side of the Blazer simultaneously. The Blazer says, "Exit." You're now back in printing mode, ready to continue Brailleing your own documents.

Checking the Blazer's Revision Date

You can find out whether your Blazer's internal software is up to date by checking its revision date. Here's how.

Enter menu mode by pressing the three keys on the right side of the Blazer simultaneously, the Blazer says, "Configuration, Speech config." Press Skip (the middle key) four times to arrive at the Service menu. The Blazer says, "Service menu."

Move directly to the option for finding out your Blazer's revision date as follows. First, press Enter (the key closest to you). The Blazer says, "Print manual?" Since we want to bypass this option, press skip fourteen times to arrive at, "Month, Date, year revision date", where month, date, and year refer to the specific date when your Blazer was last updated. For example, your Blazer might say something like, "October 25, 1996 revision date."

To exit menu mode, press the three keys on the right side of the Blazer simultaneously. The Blazer says, "Exit." You're now back in printing mode, ready to continue Brailleing your own documents.

Appendix: Commonly Asked Questions

Here are the questions we get most often about operating the Braille Blazer.

We suggest you try out the solutions we recommend before calling for help.

It might save you a long-distance call.

When I Braille a document with the Blazer, the Braille seems very scrunched up and too close together.

You may have the Blazer set to Braille in graphics mode and/or label mode. Both these modes produce Braille dots closer together than is normal. Make sure the knob on the right side of the platen bar is facing toward the back of the Blazer, and make sure label mode is turned off from within the Printer Configuration menu.

When I Braille a document, I get a blank page between every page of Braille.

It's best to let your Braille translator format your document rather than the Blazer. So make sure the following format parameters on the Blazer are set properly from within the Printer Configuration menu.

Left margin = 0

Right margin = 34

Top margin = 0

Lines per page = 0

Word wrap = Off

Note: Make sure your Braille translator is not set to Braille with a line length of 40, as for the Juliet Braille embosser, for example. The Blazer can only handle a maximum line length of 34.

When I try to Braille a document, all I get is speech from the Blazer.

Enter menu mode and go into the Speech Configuration menu, enter the options for changing the port, and cycle to Off. Then exit menu mode and try sending your document to the Blazer again.

When I try to Braille a document from my Braille n speak, Type n Speak, or Braille Lite with the Blazer, the formatting is wrong.

It's best to let your notetaker format your document rather than the Blazer. So make sure the following format parameters on the Blazer are set properly from within the Printer Configuration menu.

Left margin = 0

Right margin = 34

Top margin = 0

Lines per page = 0

Word wrap = Off 5.

I'm trying to use the Blazer as a speech synthesizer with my computer, but it doesn't talk.

There are several possibilities to consider:

- Make sure the connection between your computer and the Blazer is working properly.
- Check that the serial port on the Blazer is active from within the Speech Configuration menu.
- If you're using a "straight-through" cable between the Blazer and the other device, you may need to use a null modem cable for the transmission to work properly.
- Make sure the screen access program you're trying to use supports the Braille n speak as a speech synthesizer, that you've properly installed the Braille n speak driver on your

system, and that you've instructed your screen access program to use the Braille n speak driver for speech output.

Note: Older models of the Blazer's built-in speech synthesizer did not support indexing (the ability of the speech synthesizer to match precisely to a reading cursor). Most Windows-based screen access programs require speech synthesizers to perform indexing. Call us to update your unit.

The Blazer is Brailing and speaking the contents of my document.

You have the same port active in both the Blazer's Speech Configuration ;menu and its Printer Configuration menu. Generally, you want to have the serial port active in the Blazer's Speech Configuration menu and the parallel port active in the Blazer's Printer Configuration ;menu.

The Blazer is not skipping blank lines as my document is Brailled.

Make sure to turn on Auto Linefeed from within the Blazer's Printer Configuration menu.

The Blazer is not honoring page breaks in my document as it Brailles.

If you're Brailing your document using a Braille translator, make sure the Blazer has Lines per Page set to 0 in its Printer Configuration menu.

The Blazer is splitting words inconsistently at the ends of lines as it Brailles my document.

Make sure the Blazer has Word Wrap turned off from within its Printer Configuration menu.

The Blazer is producing garbage characters at the beginning of my document.

Make sure to turn on your computer or notetaker before you turn on the Blazer for printing.

