



LESS FORCE.

LESS WEIGHT.

LESS

NOISE.

MORE **POSSIBILITIES...**

English

Please read this manual before using the Next Generation™ Perkins Brailler®

Instruction Manual



Letter from the President

Welcome to the NEW Next Generation™ Perkins Brailler®! We are thrilled to announce that, after almost 60 years of outstanding performance which has made the Perkins Brailler the most widely used brailler in the world, we are introducing a new, improved version of this well-loved classic.

The Next Generation Perkins Brailler introduces a number of new features which will make the brailler easier to use and more versatile in a variety of environments. This redesign was not undertaken lightly. We went through an exhaustive user-research process, scientifically conducted with braille readers and writers all over the world, in order to understand which attributes were most valued as well as most desired. We have retained the features which have made the Perkins Brailler the premiere mechanical braille writer, sold in over 170 countries, and added features which people have requested.

The Next Generation Perkins Brailler is:

- Lighter and more portable
- Quieter
- Lighter touch easier to depress the keys
- Colorful it now comes in raspberry and midnight blue
- Easier to use with a built-in eraser, a reading rest for reading the page effortlessly, a handle which is easier to grip, front panel margin guides and paper feed knobs that are easier to hold and turn

Like the classic Perkins Brailler, the *Next Generation* Perkins Brailler is extremely durable and produces high-quality braille. Almost 60 years after the first Perkins Brailler was produced, the *Next Generation* Perkins Brailler will continue to play a part in bringing education, literacy and independence to people throughout the world. Please visit our website dedicated to the *Next Generation* Perkins Brailler at www.perkinsbrailler.org for more information.

Perkins Products / Howe Press also provides many other products for individuals who are blind, low-vision and/or have learning disabilities. Please feel free to contact us for a catalog, or visit our website at www.perkinsproducts.org for additional information on our general product offering. In addition please visit www.perkins.org to learn more about our history, our services and our other products including assistive technology and publications.

Sincerely,

Steven M. Rothstein, *President*

Perkins School for the Blind

David Morgan, General Manager

Perkins Products

All we see is **possibility**



Portability

Lighter – about 25% lighter

Easy-Grip Handle – Brailler is easier to carry

Smaller footprint – about 2 inches less wide and $\frac{1}{2}$ inch less high

Sound

Quieter – keystroke noise reduced by at least half plus the end-of-line bell is audible but muted

Ergonomics – Ease of Use

Less key force required

Shorter key stroke – keys are lower to the table creating a shorter keystroke; less awkward to position fingers, more comfortable, less tiring and easier to braille for long periods

Features and Functions

Margin guides on front of brailler – easily accessible

Easy-Erase Button – easily erase the cell, then braille over

Reading Rest – provides a flat surface for checking the braille

Paper-Feed Knobs – shaped to fit a hand; easier to turn than a round knob

High contrast colors between keys and brailler body for low vision users

Highly durable – inner metal frame and shock-absorbing outer polycarbonate shell

Fits most common size paper -28 cells; fits up to $8\frac{1}{2}$ inch wide and 14 inch long paper (21.6 cms W \times 35.6 cms L)

Easy to service for regular cleaning and minor repairs – bottom screws can be removed allowing access to brailler workings

Other Features and Benefits

Cool colors – raspberry, midnight blue

More environmentally friendly – less oil used, recyclable polycarbonate

More tactile-friendly – sleek lines and materials which are interesting to handle

Unpacking Your Brailler

Please note that this manual is also available on cassette tape upon request from Perkins Products / Howe Press and may be found on our website in multiple languages at www.perkinsbrailler.org.

- 1. As you open the box, you will find a plastic bag containing print and braille copies of the brailler manual and a registration card.
- 2. Set the braille box in a vertical position on a flat surface so the box handle is at the top, and open the box.
- 3. Remove the plastic wrap covering the brailler.
- **4.** Reach into the box, use the handle which is the base of the brailler to pull the brailler out of the box.
- **5.** Enclosed with the brailler is a sheet of paper which shows the results of a quality control and embossing test.
- 6. Gently pull the carriage lever back to the left in order to prepare for inserting the paper. Depress the line spacing key on the left of the brailler until it cannot be depressed any further to ensure that the paper drum is in the proper position to accept paper.

Getting Started

Throughout the following sections, the assumption is that the brailler is in front of you with the keys facing towards you.

NEW Next Generation Perkins Brailler Features

The Next Generation Perkins Brailler has a different look and feel from the Classic Perkins Brailler, as well as new features and benefits which will make it lighter and easier to use. Let us give you an overview of the NEW Perkins Brailler.

Easy-Grip Handle

• The Easy-Grip Handle is integral to the brailler base, not a separately attached handle. The base is constructed with an opening below the keys which allows you to place your hand underneath the keys in order to grasp the rounded base piece which acts as a handle.

Margin Guides

• The margin guides are now on the front of the brailler above the keys in a slot running the width of the brailler, making it easier to set up the page. Above the slot are 36 raised lines to indicate cell markings for orienting the cell position. Of the 36, 28 are available for brailling. The first 5 markings on the left and the last 3 markings on the right indicate margins only and will not braille.

Gently push down on each margin guide and slide to the left or right in order to position the margins. Once the margin guide is positioned where you want it, move it slightly from left to right until it clicks into place.

Above the margin guides and below the top of the brailler is a series of raised lines which indicate the position of each braille cell. Each cell width is marked by a short vertical line, and every fifth cell is marked by a long vertical line for a total of 28 cell markings, the maximum brailling width of the brailler.

PLEASE NOTE:

THE MAXIMUM PAPER WIDTH FOR THE NEXT GENERATION BRAILLER IS 8 ½ inches (21.6 cms). The brailler can accommodate paper length up to approximately 14 inches (35.6 cms). For best results, use 8 ½ inch x 11 inch or A4 sized paper.

Easy-Erase Button and Carriage Release

The Next Generation Perkins Brailler has a feature which brailler users have been asking for — a built-in erase function!

- To the right of the embossing head is a small round button which is the Easy-Erase Button. If you make a mistake while brailling, simply backspace twice, and then press the Easy-Erase Button to flatten the braille cell.
- If you have moved beyond the error and need to go back to correct it, find the cell which needs to be erased and position the Easy-Erase button directly over the incorrect cell. Then, press the Easy-Erase Button.

PLEASE NOTE:

- THE FIRST CELL OF A LINE CANNOT BE ERASED WITH THE EASY-ERASE BUTTON
- THE EASY-ERASE BUTTON ELIMINATES THE ENTIRE BRAILLE CELL ALL 6 DOTS ARE ERASED.

Reading Rest

- The Reading Rest is located by reaching to the back of the brailler at the bottom and gently pulling up on the rectangular piece so it is level, and parallel with the table surface. The Reading Rest panel has indentations on each side to accommodate your fingers and enable you to gently pull the panel upwards.
- This feature was developed so that when brailling a user can read what has been brailled more easily, without having to lean over and manually support the paper in order to feel the braille cells.
 The Reading Rest positions the paper and provides a hard, flat surface against which to read the braille page.
- In addition, the Reading Rest has a raised line on the left side which will help guide the paper into the brailler. Please do not push hard on the Reading Rest or it will fall back into position against the brailler.

The Perkins Brailler is guaranteed for one year against defective materials and workmanship. If there is a problem using the brailler, you can contact Perkins Products / Howe Press. For more timely support, phone or e-mail communications are preferred.

PERKINS PRODUCTS / HOWE PRESS

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Watertown, MA, USA 02472-2790

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Email: perkinsproducts@perkins.org

Website: www.perkinsbrailler.org, www.perkins.org

Staff will assist you to either solve the problem or make arrangements for returning your brailler.

Your brailler was thoroughly oiled at the factory. Initially, you may wish to roll a blank sheet of braille paper in and out of the machine a few times to absorb any excess oil remaining inside. This process will prevent any oil spots from appearing on your first pages of braille.

Be sure to keep the carton in which the brailler was shipped to you. Using the carton is the easiest way to ship the brailler back to the factory for repair.

Machine Layout and Basic Functions

Throughout this section, the assumption is being made that the brailler is in front of you with the keys toward you.

Keys

There are nine keys across the front of the Perkins Brailler. The spacebar is in the middle. If you move to the left of the spacebar, you will find the keys for dots 1, 2, and 3, then the line spacing key at the far left. If you move to the right of the spacebar, you will find the keys for dots 4, 5, and 6, then the backspace key at the far right.

Paper-Feed Knobs

These knobs have been redesigned to be easier to hold and turn. They project out from the left and right sides of the brailler, and are used for rolling paper into and out of the machine. See the Inserting and Removing Paper section for more information.

Paper Release Levers

There are two levers, one at each side of the brailler on the top surface, near the back. They are moved by simply pulling towards you to insert paper and pushing away from you to secure the paper in place before rolling it into the brailler.

Carriage, Carriage Release Button and Easy-Erase Button, and Embossing Head

The carriage includes the smooth Carriage Release Button, the Easy-Erase Button and the embossing head. The function of the carriage is to move the embossing head across the paper, brailling as it moves from left to right.

- To move the carriage to the right, you can use the spacebar or gently press the Carriage Release Button on top of the brailler, and slide the carriage to any position on the line. To stop the carriage from moving, release the pressure on the button and the carriage will stop in place.
- To move the carriage to the left, the Carriage Release Button is not used. Rather, you simply put your hand to the right of the carriage and push to the left.
- To ensure that the carriage will begin brailling at the left margin, it is recommended that you pull the carriage all the way back to the left by pushing on the right side of the carriage. The brailler will make a slight clicking noise as the carriage moves, but this does not harm the machine. Avoid roughly slamming the carriage to the left or the right, as this can damage the embossing head.

Left and Right Margin Guides and Bell

The left and right margin guides are vertical raised tabs which can be gently pushed down to adjust the margins by sliding each tab to the left or right. They are located in a slot on the FRONT of the machine, as opposed to the back of the machine on the Classic Perkins Brailler.

- The bell is fixed to the carriage and rings 3 cells before the end of the line. You will notice that it is markedly quieter than the bell on the Classic Perkins Brailler still audible, but muted.
- Before setting margins, insert into the brailler a piece of paper of the width you plan to use. Push down on the left margin guide and slide it to the left until you cannot move it any farther, and then release it. To position the right margin guide accurately, slide the carriage to the position where you would like to set the right margin. Once the margin guide is positioned where you want it, move it slightly from left to right until it clicks into place.
- It is a good idea to move the carriage across the line after setting the margins to be sure they are set correctly.

Inserting and Removing Braille Paper

The Next Generation Perkins Brailler is designed to use paper up to 8 1/2 inches (21.6 cms) wide and up to 14 inches (35.6 cms) long. It can accommodate up to one sheet of heavyweight braille paper, which is .007 inches thick (or between 70 and 100 pound weight measurement). Paper thicker than this will not fit easily between the rollers.

Lightweight braille paper or any other paper that is relatively stiff (approximately 70 pound weight) is fine. Notebook or copy paper should not be used because it could easily tear and get caught in the paper rolling mechanism. It also will not hold braille dots well.

Please be aware that the use of self-adhesive labels in the brailler can cause difficulties. Over time, glue from these labels can build up on the rollers and embossing pins. Labels can also peel off in the brailler and adhere to the rollers or other parts of the machine. If this should happen, maintenance by a trained repair technician is recommended.

PLEASE NOTE:

FOR BEST RESULTS, HEAVYWEIGHT BRAILLE PAPER SHOULD BE USED. DO NOT LEAVE BRAILLE PAPER IN THE MACHINE FOR AN EXTENDED PERIOD OR THE PAPER WILL CURL.

Inserting Paper

Heavyweight paper is easier to insert than lightweight paper or paper with bent corners. It is recommended that you set up your machine as described in the following steps and use heavyweight paper until you are comfortable inserting paper.

- 1. Press the line spacing key until it cannot be depressed any more or turn the roller handles away from you until they stop turning.
- 2. Pull the paper release levers toward you as far as they will go. You can use either or both levers. This separates the two rollers slightly so you can insert the paper between the rollers and roll it in.
- 3. Lift the Reading Rest by reaching to the back of the brailler at the bottom. The Reading Rest panel has indentations on each side at the bottom to accommodate your fingers and enable you to gently pull the panel upwards. Gently lift the Reading Rest and pull it towards the middle of the brailler until it is level with the surface on which the brailler is resting and it locks into place. Take the narrow edge of the paper and rest it on the Reading Rest, sliding the left side of the paper against the raised line which acts as a paper guide.

- **4.** Guide the paper gently under the embossing head and between the rollers. Slide the paper left and right a little to make sure it is in as far as it will go.
- 5. Hold the paper in place with one hand and with your other hand push the paper release lever as far away from you as possible.
- **6.** Let go of the paper. The paper should not move if you tug on it gently from either end; it is clamped into the machine.
- 7. Turn one or both paper feed knobs toward you. Keep turning the knobs toward you until you cannot turn them any farther. The paper should then be rolled into the machine as far as it will go. If the paper feed knobs will not turn, the paper was not inserted correctly; pull the paper release levers toward you and repeat steps 1 through 6.
- **8.** Press the line spacing key once. Doing so engages the line spacing mechanism and positions the top margin correctly.

Removing Paper

You can remove paper from the brailler by either pressing the line spacing key repeatedly until it stops moving the paper, or by turning the paper feed knobs away from you until they will not turn. Once you have rolled the paper out all the way, pull the paper release levers toward you and remove the paper. Do not pull the levers toward you unless the paper is completely rolled out. Do not yank or roughly pull paper out of the machine by force.

Brailling Tips

The following tips should help you produce high-quality braille:

- After the paper is rolled in, the line spacing key has been pressed once, and the carriage is at the far left, you are ready to start brailling.
- The spacebar will move up and down when you press other keys; this is normal.
- Try to press all the keys for a particular character at the same time.
- A consistent pressure when brailling will ensure the evenness of your braille dots. The Perkins Brailler is designed so that once you apply a certain amount of pressure to the keys, extra pressure will not make the dots clearer.

- For comfort, keep your fingers curved rather than extended straight when brailling. (Whatever position works best for you is acceptable).
- Try to keep any fingers not needed for brailling a particular character out of the way of other keys, so that you do not inadvertently press keys or get unwanted dots in your brailling.
- After brailling each character, be sure to release all keys completely.
 If you do not release all keys, the carriage may not advance properly along the line.
- If the carriage sticks or is sluggish as it moves across a line, the paper probably was not inserted correctly. Finish the line, then roll the paper out and reinsert it. The spacing between the line you just finished and the one you braille after reinserting the paper may not be quite right, so if exact spacing is important, you may need to start over on a fresh sheet of paper.

When you have brailled as much as you want on a line, press the line spacing key and pull the carriage back to the left margin. Note that if you braille all the way to the right margin, the keys will lock, and you will be unable to braille anything until you move the carriage back to the left.

Correcting Brailling Errors

As described above in the New Features section, the Easy-Erase Button has made erasing part of the brailling process rather than a separate step.

- To the right of the embossing head is a small round button which is the Easy-Erase Button. If you make a mistake while brailling, simply backspace twice, and then press the Easy-Erase Button firmly 3 or 4 times to flatten the braille cell.
- If you have moved beyond the error and need to go back to correct it, find the cell which needs to be erased and position the Easy-Erase button directly over the incorrect cell. Then, press the Easy-Erase Button.

PLEASE NOTE:

- THE FIRST CELL OF A LINE CANNOT BE ERASED WITH THE EASY-ERASE BUTTON.
- THE EASY-ERASE BUTTON ELIMINATES THE ENTIRE BRAILLE CELL ALL 6 DOTS ARE ERASED.

- If you want to correct errors on a page, it is best to correct them as you go or before you remove the paper from the brailler.
- This is because repeatedly rolling the paper back and forth can cause it to creep, or move out of alignment, so that the additional characters you braille are higher or lower than those already on the line, making correcting mistakes difficult. The more you roll the paper back and forth, the more noticeable the creeping becomes. The amount of creeping also depends on the thickness and stiffness of the paper you are using.

Care and Storage

When you are not using your Perkins Brailler, cover it with a towel or cloth to prevent the collection of dust. Dust combines with oil to form an abrasive paste which can damage the machine over time.

Try not to drop your brailler. Though it is designed to withstand normal wear and tear and deliver years of service, it is a precision machine which can be damaged by a fall.

The brailler is thoroughly oiled at the factory with non-oxidizing oil, so you should not oil it yourself. Only non-oxidizing oil should be used. Oiling should be done by a trained brailler repair technician; otherwise, your brailler may be permanently damaged or made inoperable.

The brailler is made of aluminum and indestructible polycarbonate. Though durable, a sharp object can scratch it. Please handle your brailler with care.

Do not leave the brailler in hot places such as on a radiator or in direct sunlight. The polycarbonate outer shell and the rubber in the machine could degrade with exposure to extreme heat.

Though the brailler is designed to withstand corrosion, try not to expose it to excessive dampness. Exposing the machine to salt water and spilling liquid into it are particularly damaging.

If you travel with your brailler, use a carrying case if you have one. Try to keep the brailler from getting jostled, and do not check it as baggage if at all possible. A soft side carrying case for the *Next Generation* Perkins Brailler is available from Perkins Products / Howe Press and works especially well for transporting the machine or storing it when not in use.

Returning the Brailler for Repair

Please do not attempt to take the brailler apart unless you have been trained to do so and have all the proper tools. The brailler has over 350 unique parts that are very small, and these parts must be placed exactly in the correct location for proper operation of the machine.

If you are having minor difficulties with your brailler, contact Perkins Products / Howe Press to see if the problem can be solved without sending it in. If you do need to return the brailler, send a letter along with the machine describing the problem. Be sure to include your contact information and the serial number of your machine. The serial number is on a sticker on the bottom of the brailler in both print and braille.

If there is an obvious structural problem with your new brailler, return the machine for a replacement.

When packing up your brailler, please do the following to protect it during shipping:

- I. Push the paper release levers away from you as far as they will go.
- 2. Move the carriage to the center of the brailler.

- 3. If you have the original packing material, pack the brailler as you received it. If not, do the following:
- 4. Wrap the machine in paper or plastic.
- 5. Put the brailler in a large, strong box and pack crumpled newspaper around it. It is especially important to pack the ends well so that the paper feed knobs are at least two inches from the sides of the box. Do not use small packing material such as packing peanuts because these can get inside the machine and create problems.

Send the brailler to Perkins Products / Howe Press, Perkins School for the Blind, I75 North Beacon Street, Watertown, MA, 02472, USA. If you are mailing your brailler from within the U.S., write "Braille writer returned for repairs" on the box. This allows you to send it without postage, in accordance with Free Matter for the Blind, Public Law 87-793.

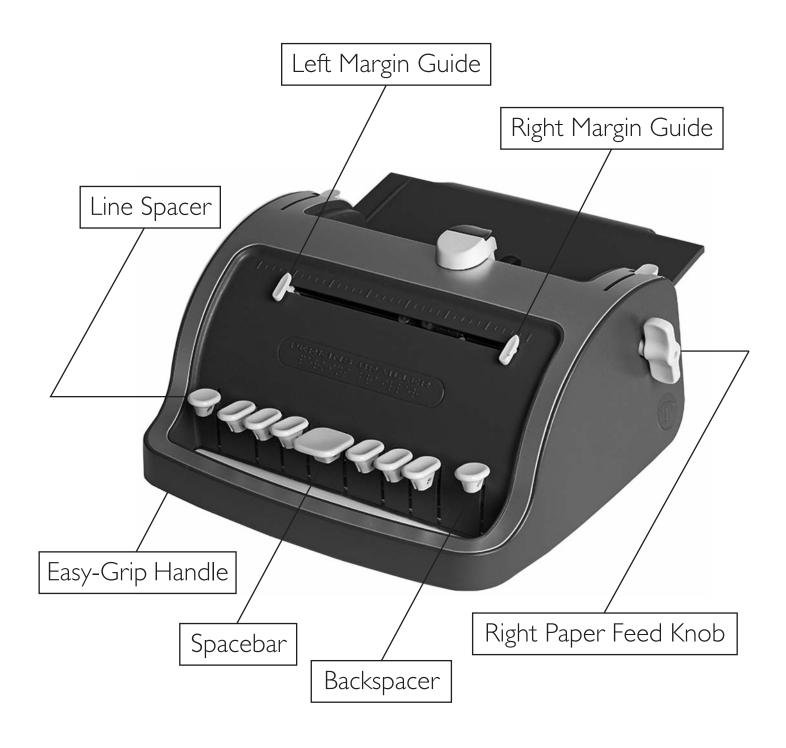
There is a 90 day warranty on repair parts and labor.

PLEASE FILL OUT AND RETURN THE WARRANTY CARD TO PERKINS PRODUCTS TO ENSURE THAT WE HAVE YOUR INFORMATION ON RECORD.

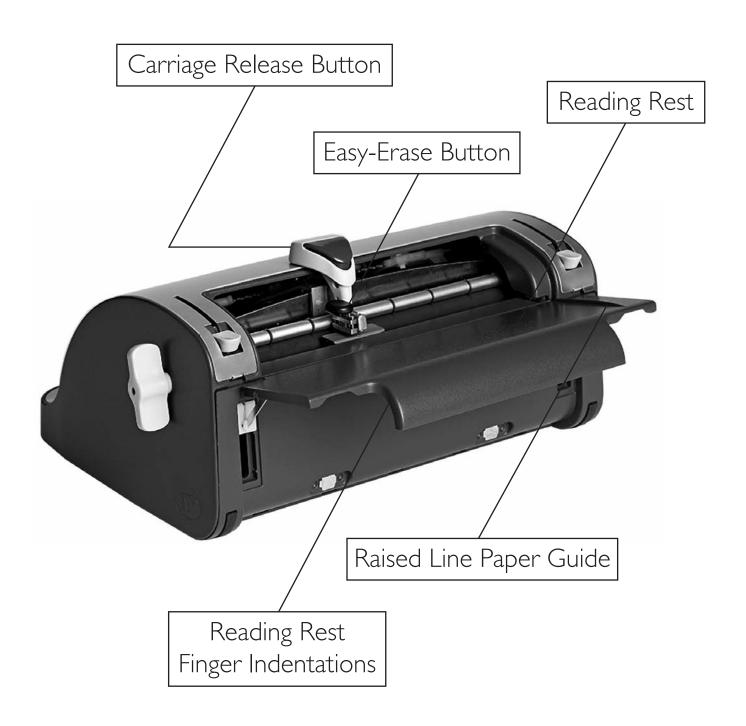
Perkins Products / Howe Press does NOT pay for shipping damage, so it is recommended that you insure your brailler. U.S. Postal code will allow the sender to pay for additional insurance on braillers shipped as "Free Matter for the Blind".

Once your brailler is received, a repair technician will examine your machine, identify problems and make necessary repairs. You will then be contacted with the cost of those repairs. Once your payment for the needed repairs is received the unit will be shipped back to you. We realize the inconvenience of a broken machine and will repair and return your brailler as soon as possible.









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