Cosmo Braille Writer

User Manual

WWW.EBRAILLER.COM

201-665-9219

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USA

U.S. Manual Version

Cosmo Braille Writer
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1. Introduction
Electronic Brailler has developed a new concept intended to teach blind children Braille.

You can skip this introduction and proceed to the Ebrailler Cosmo Keyboard; we will not be insulted if you just want to get started.

1.1. The teaching and use of Braille in North America.
In the United States and Canada, during the mid1980's and 1990's when the voice synthesizer was developed to be used with a computer and text to speech software applications also came into development, many agencies and schools responsible for the education of blind children decided Braille was dead. For a period of approximately ten years Braille was not taught to blind children as it had been in years prior. Braille books were expensive and difficult to obtain, the requirements for teachers who specialized in education of blind students were relaxed. Most education degree programs no longer required educators for the blind to learn Braille. The result was a generation of blind people who did not read Braille. It has been researched and proven; blind adults are more successful when they know Braille. Seventy percent of blind adults are currently unemployed. Of the 30% who are employed 97% are Braille users. This fact has been researched by the National Federation of the Blind, The American Council of the Blind, The Department of Education as well as the Library of Congress.

Using BERT hardware and software, teachers trained to use Braille can monitor a student's work over the internet offering a real time side by side learning experience for both teacher and student. Most blind students are mainstreamed in to local schools near their homes where sighted students also attend classes. In many countries, teachers who specialize in teaching the blind students travel from home or the government agency

where their office is located to remote schools where their students attend. The itinerant Braille teachers can now travel less and therefore be able to concentrate more of their time on individual students who are having difficulty learning. This will also make it possible for fewer teachers to work with a larger number of students. Government agencies responsible for teaching blind students would better utilize scarce funds currently being used for fuel and maintenance for their vehicles rather than direct educational deliverables.

In areas where trained teachers teach Braille to children are not available or few in number, organizations or various agencies that teach Braille would be able to offer remote education for these students. Many times a parent or teacher assistant would be able to be trained well enough about the BERT application and Braille writer to assist the remote educator.

1.2. Notes, Notices and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your printer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

1.3. Legal material

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1.4. CAUTION: SAFETY INSTRUCTIONS

Use the following safety guidelines to help ensure your own personal safety and to help protect your printer and working environment from potential damage.

• Use only the power cable provided with this product or the manufacturer's authorized replacement power cable.

• Connect the power cable to an electrical outlet that is near the product and easily accessible.

• Refer service or repairs, other than those described in the user documentation, to a professional service person.

2. Getting Started
2.1. Understanding the eBrailler Cosmo Parts

Front of Unit

Back of Unit
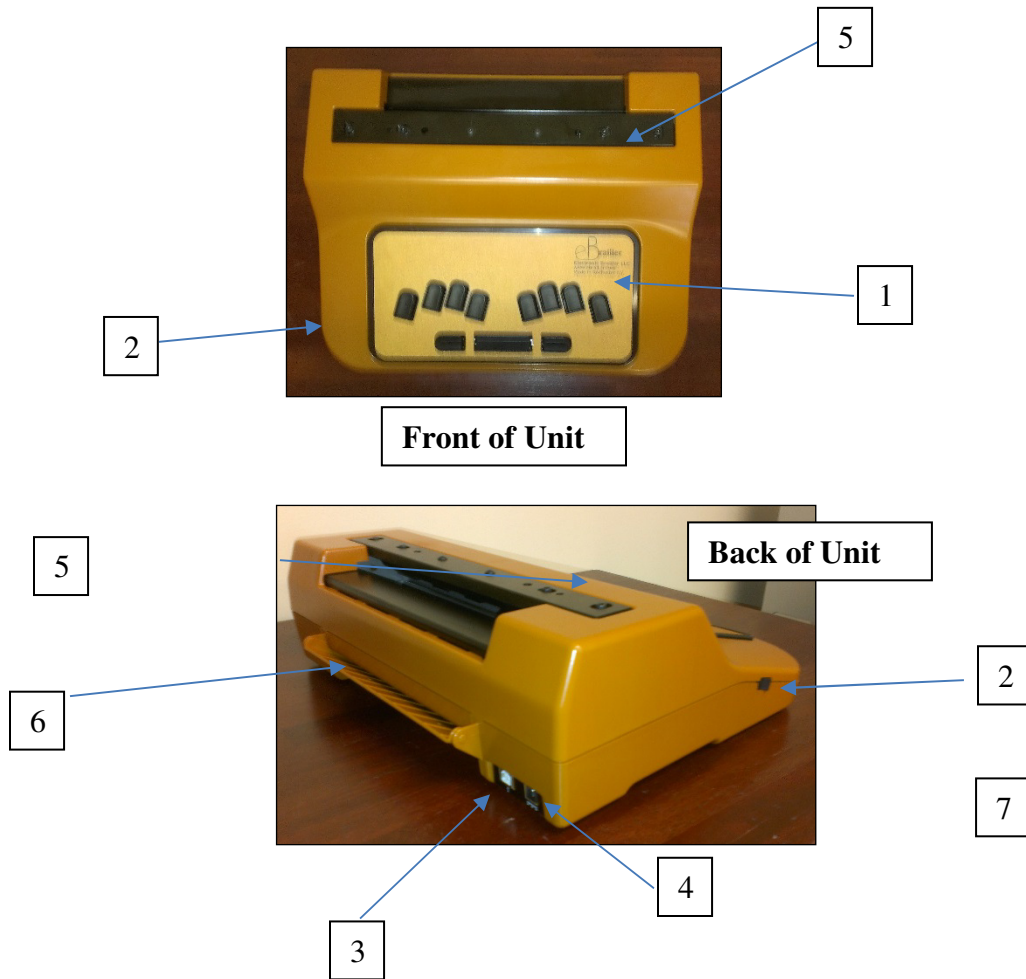
Number	Description
1	**Keyboard, front of the unit**
2	**Power Switch is located on the left side of the unit, Rock Backward (toward back) to turn on Cosmo**
3	**USB Port is located on the left side of the back of the unit.**
4	**Power Port also located on the left side of the back of the unit**
5	**Paper Exit, Read Bar is located on top of the unit at the back**
6	**Paper Input, Single page feed is located on the back side of the unit below the Paper Exit**
7	**Hand Hold for Picking up Cosmo, the indentations on the right and left sides of the unit**

2.2. Power Up Cosmo

The USB connection and Power connection are to the rear of Cosmo. The Power unit is a standard 12 Volt Universal power connector. Just plug the power adapter into the wall outlet and connect the barrel connector into the receptacle at the rear of Cosmo. The on / off switch is on the left side of Cosmo about three inches from the front edge. You will hear Cosmo cycle up and then a series of audible beeps when Cosmo is turned on. Cosmo is ready to work. If you have the optional Battery pack and charger for the Battery these options work separately from the Universal power supply that comes with Cosmo. The Battery simply plugs in to the rear of Cosmo using the same size of barrel connector as the power adapter uses and the battery is inserted in the same connection port where the power adapter would normally be connected. The battery is charged with a smart charging unit.

2.3. The Sounds of Cosmo

When you first turn on Cosmo you hear the emboss head zero. This is the emboss head finding the start position for the logic circuits. If the emboss head is in the correct position you will hear two beeps. If the emboss head is not aligned at start up there will be four beeps.

When you reach the last line on a page where Braille can be embossed there will be two beeping sounds.

If there is no paper in Cosmo and you try to Braille in from the keyboard in stand-alone mode each key depressed will make an audible beep.

If you try to load paper and the paper is not completely against the paper feed rollers you will hear four beeps .Any time you hear four beeps there is an error.

When Cosmo connects to the computer there is a musical up tone, when Cosmo disconnects there is a musical down tone.

2.4. Loading Paper

Paper is loaded from the rear of Cosmo.

Facing the Braille writer from the front; push the paper in to the slot at the rear bottom of Cosmo aligning the left side of the paper with the left side of the paper slot. Push the paper all the way in, until it reaches the rollers inside of Cosmo. The paper will stop.

Lift the paper so that you can apply pressure to the edge of the paper, **while applying pressure to the paper**, Press the ALT and CTRL keys at the same time, (ALT is to the left of the space bar the CTRL is to the right of space bar). Continue to push the rear of the paper until as paper loads. The paper will feed to the emboss position in Cosmo.

NOTE: 1 Multipage Embossing
When embossing more than one page Cosmo stops embossing at the end of the page and will continue the next page after a new piece of paper is loaded. Cosmo will repeat the process one page at a time until the Braille Document is complete. When Cosmo stops embossing the document because the document is complete press the CTRL and carriage return function keys on the Cosmo keyboard to eject the last page.

NOTE: 2 Paper Jam
There is a door under the unit which allows access to the paper feed path. If there is a paper jam, disconnect Cosmo from any power supply, disconnect the USB connector and tilt the Cosmo unit to the back. The release for the paper tray is in the center of the tray toward the front of the Cosmo unit. Remove the safety screw near the latch and then depress the square latch and the door will open. Gently pull the paper out of the Cosmo Unit. CLOSE THE DOOR AND REPLACE ANY REMOVED SCREWS BEFORE RESUMING USE OF COSMO.

3. eBrailler Cosmo Stand Alone Braille Writer

When off line or not connected to a personal computer Cosmo works as a standard Braille writer. The only functionality when in standalone mode for the CTRL and ALT keys are to load paper and form feed or remove the paper after you are finished with the page. The other standard key functions work as listed above. When you reach the last line on a page where Braille can be embossed there will be two beeping sounds. After that line either carriage return or paper feed and load another page.

4. Key assignments for eBrailler Cosmo when not used as a stand-alone

The Keyboard has 8 Braille keys and a space bar. The key left of the space bar is "ALT" and to the right of the space bar is "CTRL". Braille Key7 is far left and Braille Key 8 is far right. The key functions when using the Duxbury Braille Translation application allow Braille input and use of the function and file commands.

The space bar used with any key is sometimes referred to as a cord key function

5. Basic typewriter functions.

Key 8 ………… carriage return line feed, or enter, used either when inputting to Duxbury or in stand-alone mode

Key 7 ………… back space, used either when inputting to Duxbury or in stand-alone mode

Key 1 + space bar … cursor up or line up one line, only used when inputting into Duxbury

Key 4+5+space bar… Tab, only used when inputting into Duxbury.

Key 1+2+space bar … shift tab, only used when inputting into Duxbury

Key 4+space bar … line down, only used when inputting into Duxbury

Key 7+space bar … erase and back space, used When inputting into Duxbury or in stand-alone mode.

Key 8+space bar … read mode after the user is finished reading, any key pressed brings paper back in their document and they can continue typing Braille, only used in stand-alone mode.

Key1+2+3+4+5+6+space bar…. Escape - to main menu, or return to document from main menu only when inputting to Duxbury.

Key 4+space bar …. Cursor arrow down, only when inputting to Duxbury.

Key 1+space bar …… Cursor arrow up, only when inputting to Duxbury.

Key 3+space bar….. Cursor 1 character back, only when inputting to Duxbury.

Key 6+space bar….. Cursor 1 character forward, only when inputting to Duxbury.

Key 2+5+space bar ….On Line / Computer mode, when the EBrailler is used to emboss documents from Duxbury.

Key 3+6+space bar….Off Line / Typewriter mode, only when the EBrailler is used to emboss documents from Duxbury.

6. Brailler functions – these two functions are programmed into the Brailler Firmware

7+8 reset the embossing head home function

7+8 Chord test

Control + alt … load paper

8+CTRL… if paper is loaded Form Feed

Read Key Function, key8 + spacebar

The read function brings the document up four lines so that you the user can read the document or last line of the document to view the last character typed. When the user is ready to continue typing press any key on the keyboard and the paper will move back to the exact place where it was before the read was pressed. Then after the paper is in place continue with the next desired character.

Back Space, key7

When typing a character, after the last selected character is embossed, the emboss mechanism moves to the next space on the paper ready for the next selected Braille character to be embossed. When back space is selected It moves the emboss mechanism back one character space and it is ready for the next command. Each time back space is selected the emboss mechanism moves only one space so if you need to remove a character or add a character three places from the last character typed you must press back space three times.

Backspace and Erase, spacebar + key7

When the backspace and erase function is used the emboss mechanism moves back one character to the previous character and presses the Braille character flat. So for example if you need to erase or press flat the fourth character from the last character press back space three times then press back space and erase one time. After the character is pressed by the emboss mechanism the carriage moves one space right so if you want to replace the erased character press back space again and type the new character. Press the proper number of spaces to bring the emboss mechanism to the proper place in the line to continue typing your document.

7. Connecting eBrailler Cosmo to a Computer

Facing Cosmo from the front; The USB connection and Power connection are to the rear of Cosmo left of the paper feed tray. The USB is a standard USB Client and the power connection is a standard Barrel connector. The USB connection will be recognized by any standard PC and automatically recognize the eBrailler Cosmo after the drivers have been installed. After connectin Cosmo to the computer allow windows to serch the internet for the latest drivers. **After the drivers are installed if Cosmo is not communicating with the computer go to Settings. Select the Control Panel then Device manager. At the bottom of the list of devices connectecd to your computer is U niversal Serial Bus Controlers. Open that heading. The first device listed is Cosmo eBrailler.Right click on Cosmo and upgrade drivers. Even though you just installed the newest drivers, using the latest version of Windows it is necessary to do this step before Cosmo will communicate properly.**

7.1. Setting Up Your eBrailler Cosmo

NOTE: The eBrailler Cosmo supports Microsoft® Windows® and similar operating systems with Duxbury Braille Translator 11.2 and later.

Follow the instructions on the Setting Up Your eBrailler Cosmo Sheet to install the hardware and software.

8. Cosmo Connected to a Personal Computer

The USB Client connects to the rear of Cosmo. There are two ways of using the Cosmo Braille Writer

1.) Cosmo only sends the Braille file to the computer and does not make Braille on paper until the file is complete and the user presses CTRL and Emboss and then enter (emboss command) and the file is sent to the Cosmo to be embossed.
2.) Cosmo can be used as a classroom friendly Braille embosser. Open a word application in Duxbury, Press CTRL and T at the same time (translate command) and the translated file can be embossed in Braille on the Cosmo Braille Writer.

9. Cosmo with Duxbury

9.1. Braille input

Cosmo interfaces with a PC through the USB port. The user has Braille input when using the Braille keyboard as an input device when in the Duxbury Braille translator and Braille output as a Braille Embosser from Braille translation software applications.

9.2. When setting the Hardware requirements with the Duxbury application:

1.) Go to the "Global" Pull Down Menu.
2.) Select Embosser Set Up
3.) Select "EBrailler Cosmo", as the embosser. This will allow both Braille input and Braille embossing capabilities
4.) Select "Modify", be sure Write to Port is selected.

9.3. When inputting Braille from the Cosmo Braille keyboard as a new document:

1.) Select the "File" Pull Down Menu in the Duxbury application.
2.) Select "NEW" from the list of options.
3.) When the next screen opens, Select from your list of templates, I use English American, the preference is up to you.

9.4. typing from Cosmo's keyboard

In the opened screen, text mode, "grade 1" Braille typed from Cosmo's keyboard will show as basic text characters. Basic Grade one characters will appear as text or Braille. Select the View pull down menu and select Braille font the characters will appear as Braille if six key entry is selected. Contracted Braille has to be input using the Translated Braille document feature. To accomplish this, while in a blank text document press space bar one time then select "Translate" either from the file pull down menu or press the CTRL and T key at the same time. This will put you into the translated Braille document screen. This will then allow grade 1 or grade 2 Braille input to the Duxbury Braille Translated document.

As Braille is typed from The Braille Writer keyboard the keys depressed will appear as Braille Characters on the computer screen. If the user, teacher aid, or parent would rather

read the Braille input as text as the student types they can select the View option at the top of the screen. The "View" Pull Down Menu and select "Translated Line from the list. There will then be a yellow-colored line at the bottom of the Braille document screen. This translate line shows the back translated Braille characters as text. In this way a teacher aid can assist their student while he or she is composing a document.

10. Embossing From Duxbury

Once the document is made and translated to Braille, either select Emboss from the file pull down menu or press the "CTRL" and "E" keys at the same time. If you are in the proper Braille screen a "file emboss" selection will appear. Press the enter key from the Cosmo Braille Writer keyboard or your computer and the document will be embossed on paper by the Cosmo Braille Writer.

Refer to the Duxbury manual for more of the functions and capabilities of the Duxbury Braille Application.

11. Braille Functions while inputting to Duxbury
 When inputting Braille while using the Duxbury translator the functions work in a similar manner as on the keyboard from your computer

Back Space
Moves the computer cursor back one space each time backspace is pressed

Back Space and Space Bar
Moves the cursor back one space and erases the character which proceeds the cursor

Alt
An example is if you hold the Alt and press the Braille combination of the letter "F" you open the file menu. Or Alt "E" will open the edit menu.

Ctrl
Example; CTRL and the Braille combination for the character "E" gives the emboss command to the Braille application and after enter is pressed on the computer keyboard the document will emboss on paper.

12. Troubleshooting

12.1. Setup Problems

Computer Problems

VERIFY THAT YOUR PRINTER IS COMPATIBLE WITH YOUR COMPUTER —
The eBrailler Cosmo supports Windows and compatible machines as well as MAC with
DBT 11.2 or later installed.

MAKE SURE YOU TURNED ON BOTH YOUR COSMO AND YOUR COMPUTER
CHECK THE POWER/USB CABLE —
• Ensure that the USB cable is firmly connected to your Cosmo and your computer.
• Ensure that the Power cable is firmly connected to your Cosmo.

CORRECT COMMUNICATION PROBLEMS BETWEEN COSMO AND THE
COMPUTER —
• Turn off the eBrailler Cosmo. Turn off your computer.
• Remove the USB cable from your eBrailler Cosmo and your computer.
• Unplug the power cable from your eBrailler Cosmo.
• Reconnect the power cable into eBrailler Cosmo and turn on the printer.
• Restart your computer.
• Reconnect the USB cable to your eBrailler Cosmo and your computer.

12.2. General Problems

Paper Problems

MAKE SURE YOU LOADED THE PAPER CORRECTLY — For more information, see
"Loading Paper."

USE ONLY PAPER RECOMMENDED FOR YOUR PRINTER — For more
information, see "Print Media Guidelines."

MAKE SURE THE PAPER IS NOT WRINKLED, TORN OR DAMAGED

CHECK FOR A PAPER JAM
There is a door under the unit which allows access to the paper feed path. If there is a
paper jam, disconnect Cosmo from any power supply, disconnect the USB connector and
tilt the Cosmo unit to the back. The release for the paper tray is in the center of the tray
toward the front of the Cosmo unit. Remove the safety screw near the latch and then
depress the square latch and the door will open. Gently pull the paper out of the Cosmo

Unit. CLOSE THE DOOR AND REPLACE ANY REMOVED SCREWS BEFORE RESUMING USE OF COSMO.

13. Contacting Electronic Brailler LLC

To contact Electronic Brailler electronically, you can access the following website or email:- please insure braille or Cosmo is in the subject line of the email.

• www.ebrailler.com
• info@ebrailler.com

NOTE: Toll-free numbers or Dealer numbers are for use within the country for which they are listed.

14. Appendix

14.1. Limited Warranties and Return Policy

Electronic Brailler-branded hardware products purchased in the U.S. or Canada come with a 90-day, 1-year, 2-year or 3-year limited warranty. To determine which warranty came with your hardware product(s), see your packing slip or invoice. The following sections describe the limited warranties and return policy for the U.S., the limited warranties and return policy for Canada, and the manufacturer guarantee for Latin America and the Caribbean.

Limited Warranty for Electronic Brailler-Branded Hardware Products (U.S. Only)

What is covered by this limited warranty?

This limited warranty covers defects in materials and workmanship in your—our end-user customer's—Electronic Brailler-branded hardware products, including Electronic Brailler-branded peripheral products.

What is not covered by this limited warranty?

This limited warranty does not cover:

• Software, including the operating system and software added to the Electronic Brailler-branded hardware products through our factory-integration system, third-party software, or the reloading of software

• Non-Electronic Brailler-branded and Solution Provider Direct products and accessories

• Problems that result from:
– External causes such as accident, abuse, misuse, or problems with electrical power
– Servicing not authorized by Electronic Brailler
– Usage that is not in accordance with product instructions
– Failure to follow the product instructions or failure to perform preventive maintenance
– Problems caused by using accessories, parts, or components not supplied by Electronic Brailler

• Products with missing or altered Service Tags or serial numbers

• Products for which Electronic Brailler has not received payment

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE (OR JURISDICTION TO JURISDICTION). ELECTRONIC BRAILLER'S RESPONSIBILITY FOR MALFUNCTIONS AND DEFECTS IN HARDWARE IS LIMITED TO REPAIR AND REPLACEMENT AS SET FORTH IN THIS WARRANTY

STATEMENT. ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN TIME TO THE TERM OF THE LIMITED WARRANTY PERIOD REFLECTED ON YOUR PACKING SLIP OR INVOICE. NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THIS LIMITATION MAY NOT APPLY TO YOU.

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SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

14.2. How will you fix my product?

We use new and refurbished parts made by various manufacturers in performing warranty repairs and in building replacement parts and systems. Refurbished parts and systems are parts or systems that have been returned to Electronic Brailler, some of which were never used by a customer. All parts and systems are inspected and tested for quality. Replacement parts and systems are covered for the remaining period of the limited warranty for the product you bought. Electronic Brailler owns all parts removed from repaired products.

14.3. May I transfer the limited warranty?
Limited warranties on systems may be transferred if the current owner transfers ownership of the system and records the transfer with us. You may record your transfer by going to Electronic Brailler's website: WWW.EBRAILLER.COM

14.4. "Total Satisfaction" Return Policy (U.S. Only)
We value our relationship with you and want to make sure that you're satisfied with your purchases. That's why we offer a "Total Satisfaction" return policy for most products that you, the end-user customer, purchase directly from Electronic Brailler. Under this policy, you may return to Electronic Brailler products that you purchased directly from Electronic Brailler for a credit or a refund of the purchase price paid, less shipping and handling and applicable return fees for 30 days.

15. FCC STATEMENT

FCC declaration of conformity
Responsible party:
Electronic Brailler, LLC
West Henrietta, NY 14586
201-665-9219 Fax: (585) 672-9119

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1)This device may not cause harmful interference, and
(2)This device must accept any interference received, including interference that may cause undesired operation.

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

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