Welcome to POLLY™
Please read this Quick Start Guide before you switch on and use your Polly for the first time.

For an online version of this guide, visit: thinkerbellllabs.com/Polly/Guide. (Note the three l’s in “thinkerbellllabs.”)

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Thank you for taking this journey with us to learn braille through Polly!

This Polly was made with love, hard work, and a whole lot of learning and unlearning. Polly has taught us humility, perspective, and the possibility of endless innovations!

We strive every day to build a more inclusive future and break barriers on the way.

Polly has been a great teacher to us. We hope it is to you, too.

From everyone here at Thinkerbell Labs and American Printing House, congratulations on starting your braille-learning journey!

Welcome to the Polly family!
Unboxing Your Polly

Inside the box, you will find:

• your very own Polly,
• a saddle style stylus,
• a power adapter and power cable,
• this Quick Start Guide, and
• a card with a printed QR code to access the digital manual, Polly ID, activation key, and Helios website.

Your power adapter and power cable come in two parts. Before you start using your Polly, connect the power cable to the power adapter and then plug the cable into your Polly.

*Please make sure you connect the adaptor and cable before you plug the cable into the socket.*

If everything looks all right, then it’s time to find out more about your Polly device before you start using it.

*We strongly suggest you do not switch on the device until you read this Quick Start Guide in its entirety.*
Learning About Your Device

- TWIN LARGE BRAILLE CELLS
- WI-FI
- BLUETOOTH
- DIGITAL BRAILLE SLATE
- NAVIGATION KEYS
- STANDARD 6-CELL BRAILLE DISPLAY
- STANDARD KEYBOARD
- SPEAKERS
- POWER IN LED INDICATOR ON/OFF SWITCH
- REPEAT BUTTON
- ETHERNET & USB PORTS
- VOLUME CONTROL AND AUDIO OUT

Polly
It’s time to familiarize yourself with your Polly. This section will tell you about the different parts of a Polly device.

*See the Introduction to Polly chapter on your Polly device for details.*

**Orientation**

Place your Polly on a flat surface with the three navigational keys closest to you. You will use the left triangle-shaped navigational key to pan left and the right triangle-shaped navigational key to pan right.

*This is the standard orientation for using your Polly device.*

For the remainder of this guide, the **top** of the device refers to the parts of the device furthest away from you. The **bottom** of the device refers to the parts of the device closest to you.

The **top face** of the device holds the braille cells and navigational keys.

The **bottom face** of your device has one sticker where you will find your Polly ID and a QR code.

The **left face** refers to the side of the device that is on your left; it includes, from top to bottom, the power jack, an LED light, the on/off switch, a Repeat button, an Ethernet port, and two USB ports.

The **right face** refers to the side of the device that is on your right; it includes, from top to bottom, the headphone jack and volume control.
Powering On/Off

To turn on the device, press the power switch towards you. To turn off the device, press the power switch away from you.

The small LED light above the power switch and the power jack indicates the power status. If this light is on, it means the device is switched on.

Once you switch on the device, wait for about 30 seconds for the device to start.

**How will you know that the device has started?**

*The braille cells at the top of the device pop up and down, and the device pulses lightly. Once the startup process completes, Polly plays you a song!*

Repeat Button

Directly below the power switch, Polly has a circular **Repeat** button.

When you press the Repeat button once, the device vibrates to indicate that it is powered on. (You can also determine if the device is powered on by checking if the LED light is illuminated.)

If you press and hold the Repeat button, Polly repeats the previous statement or instruction.
Braille Displays and Speaker

Now back to the top face of the device. Your large braille display is located on the top-left. The large braille display has two cells.

To the immediate right of these cells is the speaker. This is where you will hear Polly’s voice.

To the right of the speaker is a standard braille display. The standard braille display has six cells.

Typing Keys

Just below the braille displays, at the center of the device, you will find a panel holding the braille keyboard. There are eight keys on the braille keyboard. The six large rectangular keys are Keys 1 through 6 and are ordered, from left to right, [3,2,1] and [4,5,6]. Directly below these keys are two small circular keys. The circular key below Key 6 is the Return (or Enter) key. The circular key below Key 3 is the Backspace key.

Navigational Keys

At the very bottom of the top face, closest to you, are the three navigational keys.

The long navigational key in the center is the Spacebar. The arrow-shaped keys to the left and right of the spacebar allow you to navigate left and right, respectively.

You can use these keys to scroll through the menu, select lessons, move forward in a lesson, skip past menu items, etc.
Digital Braille Slate

Between the braille keyboard and the navigational keys, you will find six braille cells, each with six dots. This is the world’s first digital braille slate! You can use this slate with the included braille stylus to write braille, just as you would normally do on a piece of paper.

When you attempt a writing exercise on Polly, the device will prompt you to write on the braille slate.

**Important:**

*Do not poke the slate too hard or use anything except a braille stylus, as it may cause irreparable damage.*

Volume Control and Headphones

To increase the volume on your Polly device, scroll the volume control toward you. To decrease the volume, scroll the volume control away from you.

You can listen to Polly with the speaker; however, we recommend using headphones for the best experience.

Setting Up Polly Before First Use

Now you know about all of the features on your Polly device. Before you start using your Polly for the first time, there are a few important steps you need to take.
Setting Up Your Helios Account and Connecting Polly

Polly is a connected device. Since Helios and Polly are connected through the internet, you and your learner do not need to be in the same location or on the same Wi-Fi network to monitor their progress. You can access reports, track learner performance, manage content, and much more via the Helios Suite.

The Helios Suite is the web companion to your Polly device, and using it will optimize your learning experience. When you purchase a Polly, access to Helios is included.

Polly does work without the Internet; however, to get the most out of Polly, we recommend you set up a Helios account. If you choose not to set up an account, your progress will not be saved when you shut off your Polly. Then, when you start Polly again, you will not be prompted to begin where you left off in your last session.

Here are the steps for setting up Polly and connecting to the Helios Suite:

1. Locate the sticker on the bottom face of your Polly. This sticker displays the Polly ID and the QR code. You can scan the QR code to find the activation key (more about this later).


3. Enter your email address and select one of two options: Sign in With OTP or Sign in With Link. If you select the first option, Helios will
send you an email verification code (a one-time password); if you select the second option, Helios will send you a sign-in link.

4. Once you get to the Helios homepage for the first time, you will be prompted to add your Polly device by entering an activation key. Select the + Add Polly button.

5. If you haven’t already, scan the QR code to display the activation key. In the Add Polly dialog box, enter the activation key, then click the Verify button. An image of a Polly will appear, along with the words Verified Successfully!

6. Click the + Add Polly button. A Success dialog box will display.

7. Click the Dismiss button, and Helios will take you to a Polly page, where all of your Polly devices will be listed.

Remember the QR code on the bottom face of your device? This code enables you to set up your Helios account on your smartphone. Scan the code, then click the yellow pop-up link to thinkerbellllabs.com, and Helios will display a page with your Polly ID, the activation key, links to the Helios homepage and Quick Start Guide, and a blue Sign-In button. After clicking the Sign-In button, you will follow steps 3-7, above.

You can change the name of your Polly! You might find this helpful if you have more than one Polly and want to assign one device to each learner. Here’s how:

1. Click the Polly ID number.
2. In the Polly Details dialog box, click in the Nick Name field.
3. Type your desired device name.
4. Click the Update button.

You’ve successfully connected your Polly to the Helios Suite!

Creating Learner Accounts and Setting One as Default

You can set up one learner account for your Polly in Helios. Creating one account for each user will let Helios capture data for that particular learner, thus enabling you to track each learner’s performance and usage.

When you start your Polly device, you can select a default learner account (more about this later).

Here’s how to create a new learner account:

1. Sign into your Helios account and go to your homepage. (If you’re following this Quick Start Guide step-by-step, you should already be at your homepage by now. If you are not, please log in at https://polly-helios.thinkerbellllabs.com.)

2. Click Learners, and then click + Add Learner. (Alternatively, you can navigate to your account page on Helios from the homepage and click on + Add Learner there.)

3. Fill in the fields with details about the braille learner.

4. When choosing Learner Type, the Teacher/
Advanced Learner option allows the braille learner to navigate freely throughout the content on Polly. Regular Learner has a preset order of activities requiring the learner to first complete the Introduction to Polly content, which provides instructions about Polly hardware and device navigation.

5. To personalize Polly and to track your Learner’s progress on Helios, you must select a default Polly for the learner. The default learner’s account is the account that the learner will be logged into by default when they log into the Helios Suite. (We recommend that you select this option for personal usage.)

6. You can also record an audio of your learner’s name! If you do, Polly will read out that name in your voice when you switch your Polly on. Simply press and hold the red Microphone button, speak the name, and release. Click the Play arrow to listen to the recording. If you choose not to record your learner’s name, a computer-generated voice will say the name.

7. Once you finish entering the learner’s details and reviewing the Helios privacy policy, click the I Agree checkbox, then click Save.

8. A new learner will be created, and you will be navigated to their page automatically. This is where you will see all the usage details and performance analytics for that learner.
Advanced Learner option allows the braille learner to navigate freely throughout the content on Polly. Regular Learner has a preset order of activities requiring the learner to first complete the Introduction to Polly content, which provides instructions about Polly hardware and device navigation.

To personalize Polly and to track your learner’s progress on Helios, you must select a default Polly for the learner. The default learner’s account is the account that the learner will be logged into by default when they log into the Helios Suite. (We recommend that you select this option for personal usage.)

You can also record an audio of your learner’s name! If you do, Polly will read out that name in your voice when you switch your Polly on. Simply press and hold the red Microphone button, speak the name, and release. Click the Play arrow to listen to the recording. If you choose not to record your learner’s name, a computer-generated voice will say the name.

Once you finish entering the learner’s details and reviewing the Helios privacy policy, click the I Agree checkbox, then click Save.

A new learner will be created, and you will be navigated to their page automatically. This is where you will see all the usage details and performance analytics for that learner.
Congratulations!
You’ve now created a learner account, and you’re ready to switch on your Polly!

Setting Up Your Polly Network

There’s just one more thing you need to do before your Polly is up and running: Connect Polly to the Internet.

Remember:

Polly does work without the Internet. However, Polly usage and performance data is synced to Helios whenever an Internet connection is available, so you should connect via an Ethernet cable or configure a Wi-Fi Network.

If you have access to an Ethernet connection, plug in the Ethernet cable to the Ethernet port located on the left face of your device.

If you do not have an Ethernet connection, connect Polly to your Wi-Fi network in one of two ways:

Option 1: Connect via a web browser

1. Plug in the power cable and adaptor, then switch on your Polly for the first time.
2. Give Polly a few seconds to boot up. While booting, the dots in the large and standard braille cells will rise and fall a few times simultaneously.
3. Once the device fully boots, Polly will say, “Hello! I’m Polly,” and the device will play a message telling you to configure your network.
4. Navigate to Settings by pressing the right-arrow button until you hear Polly say, “Settings,” then press the Spacebar. Select Network Settings, then Modify Wi-Fi Settings Using a Web Browser. Polly will say, “Polly hotspot WiFi is now available....” Exit the Settings menu by simultaneously pressing both arrow keys and the Spacebar. Polly will return to the Main menu.

5. Connect to the Polly Hotspot via your phone or computer. To do so, open your Wi-Fi network settings and select the PollyHotspot network

   **Note:** Your phone or computer may display “No Internet” when connected to the PollyHotspot network. You may still proceed to step 6.

6. Once you are connected to PollyHotspot, open a browser and type “http://polly-wifi.net” or “http://10.0.0.2” in the URL field.

7. You will see instructions for adding your network configuration. Here is where you will enter the details of the Wi-Fi network that you want Polly to connect to. In the SSID field enter the name of your Wi-Fi network, and in the Password field enter the password you use to connect to your Wi-Fi network. (If your Wi-Fi network does not require a password, please select the Open Network option.)

   - For example, if your Wi-Fi name is “Thinkerbell” and your password is “Braille,” then you enter “Thinkerbell” in the SSID field and “Braille” in the Passphrase field.
8. Click Save. This network will now be stored in your Polly. You will only need to configure your Wi-Fi network once for Polly to connect automatically whenever it is available.


<table>
<thead>
<tr>
<th>Polly Wi-Fi Configuration Portal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configured Networks</td>
</tr>
<tr>
<td>Networks Polly is configured to connect to.</td>
</tr>
<tr>
<td>SSID</td>
</tr>
<tr>
<td>American Printing House WiFi</td>
</tr>
<tr>
<td>Thinkerbell Labs WiFi</td>
</tr>
<tr>
<td>Restart Polly</td>
</tr>
<tr>
<td>To restart your Polly with the newly configured Wi-Fi networks press ‘RESTART POLLY’</td>
</tr>
</tbody>
</table>

**Option 2: Connect directly on Polly**

1. Plug in the power cable and adaptor, then switch on your Polly for the first time.

2. Give Polly a few seconds to boot up.

3. Once the device fully boots, Polly will say, “Hello! I’m Polly,” and the device will play a message telling you to configure your network.

4. Press the Right Key until you hear Polly say, “Settings.”
5. Press the Spacebar to select the Settings menu.
6. Network Settings will be your first option. Press the Spacebar to select that option.
7. Press the Right Key until you hear Polly say, “Configure Wi-Fi on Polly,” then press the Spacebar to select that option.
8. Choose your Wi-Fi network after Polly scans for available networks.
9. Use the braille keyboard to enter your password, in UEB braille, then press the Right Key to submit.

**Polly Wi-Fi Configuration Portal**

<table>
<thead>
<tr>
<th>Available Networks</th>
<th>Frequency</th>
<th>Security</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal WiFi</td>
<td>2.432 GHz</td>
<td>WPA2</td>
<td></td>
</tr>
<tr>
<td>Neighbours WiFi</td>
<td>2.437 GHz</td>
<td>WPA2</td>
<td></td>
</tr>
</tbody>
</table>

**ENTER DETAILS MANUALLY**

1. Either select from the available networks or if you don’t see your network here, please enter the network details manually.

2. Make sure the network is active and not hidden. This page does not scan for networks while you are connected to it. To rescan please restart your Polly or relaunch the Polly Portal from Polly’s Network Settings.

3. Please note that we do not support networks requiring post connection login (e.g. Airport Networks) at the moment.
**Additional Option:** Your Polly also automatically connects to a default configured WiFi network. You can use a WiFi router or host the default network on your Android or iOS device by enabling Personal Hotspot in Settings with the following details:

SSID: polly_default  
password: pollybraille

**Note:**

1. To change the SSID/Name of the network on an iOS device go to Settings>General>About>Name.

2. Most phones can connect to a WiFi network and host a Personal Hotspot so you won’t be charged for Cellular Data

**Note:** You can connect your Polly to multiple networks. This will be useful if you want to practice your braille with Polly at home and at school. Or, if you skipped the network-setup initially, you can connect to your Wi-Fi later. To do so, navigate to Polly’s Main Menu (tap the Navigation Keys and Spacebar together to return to the main menu from anywhere in the curriculum), select Settings, select Network Settings, and then select Configure Wi-Fi. Rest assured, you will have to set up each Wi-Fi network only once!

*Please do not switch off your Polly during the reboot process!*

Once your Polly device reboots, it will welcome you.
Now you have successfully set up your Polly. It’s time to use it!

**More About the Helios Suite**

There is much more you can do on the Helios Suite. You can:

- view performance and usage reports for each learner,
- view lesson roadmaps,
- manage instructional content,
- manage learners,
- manage Polly devices, and
- give restricted access to other stakeholders involved in the learning process.
- assign homework

The Helios Suite is continuously updated. For more instructions/tutorials on the different aspects of the Helios Suite, go to the Help and Support section on the Helios homepage.

**Pro-Tips**

Here are some additional tips that will help you make the most out of your Polly experience.

- To get back to the Main menu of your content, press Spacebar + Left Key + Right Key simultaneously. This works even if you’re between lessons. Because you risk losing progress data if you are in the middle of a lesson, use this key combination only when necessary.
Note that you will lose current lesson progress when you go back.

- To move back one step in your lesson, press Left Key + Right Key simultaneously. You can also use these buttons to move up one level in the menu.
- Remember the Repeat button? Press and hold this button any time you are unsure about what the previous instruction was.
- Press the Right Key to skip past instructions that you already understand. This will take you to the next statement.
- Don’t forget to associate a default Polly to a learner. Not needing to log in every time is so much more convenient!
- Use headphones in even a slightly noisy environment for the best experience.
- When a word appears on the standard display but ends with all eight dots raised on the sixth cell, then the word is incomplete. Press and hold the Right Key to display the remainder of the word. For example, the word “absolute” requires more than six braille cells to display properly, so Polly will display the letters a-b-s-o-l and will follow that by eight raised dots in the sixth cell. Here’s what the braille will look like:

  absol::
• You will need to scroll right by pressing and holding the Right Key to display the rest of the word. When you do, Polly will display eight raised dots in the first cell and will follow that by the letters u-t-e. Here’s the braille:
  ⣿ute

• A bell will chime to alert you that Polly is about to refresh the standard braille display. Do not place your fingers on the display while it’s refreshing. If you place your fingers on the cells while a new letter or word is being displayed, then it might display incorrectly.

• To refresh the standard braille display, tap the Repeat button once.

**Maintenance**

To get the best performance out of your Polly, please adhere to the guidelines that follow.

**Proper Care Considerations for Polly**

• Do not place sharp metal objects near Polly, as Polly has a magnet that may attract the objects.
• Do not handle the Polly plug with wet hands, as it might cause an electric shock.
• Make sure to use the power cord provided with Polly. Using any other non-standard power cord will void your warranty and possibly damage Polly.
• Do not disassemble or alter any part of Polly.
• Do not put pressure on the braille cells when Polly is refreshing, as it may limit proper movement of the dots and result in incorrect outputs.
• Do not drop Polly.
• Do not apply unusual stress when handling Polly.
• Do not place Polly near liquids or spill liquids on Polly.
• Do not use Polly below 32°F (0°C) or above 122°F (50°C).
• Do not place Polly or the adapter near a radiator or heat source. Exposure to high heat may weaken Polly’s or the adaptor’s magnetic properties.

Storing Polly
• Do not put heavy objects on Polly. When not in use, cover Polly or store the device in the box it came in, as dust can damage the internal components.

Regulatory Compliance Statement
Please reach out to us for any concerns/queries that you might have.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FCC ID</th>
<th>IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANBW</td>
<td>Contains FCC ID: 2ABCB-RPI3BP</td>
<td>Contains IC: 20953-RPI3P</td>
</tr>
</tbody>
</table>

FCC Notice
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.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference.

**IC Notice**

This device complies with Industry Canada License-Exempt RSS Standard(s). 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.

Le présent appareil est conforme aux CNR d’Industrie Canada

Applicables aux appareils radio exempts de licence.

L’Exploitation est autorisée aux deux conditions suivantes:
1. L’Appareil ne doit pas produire de brouillage,
2. L’Utilisateur de l’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

**IC RF Exposure Statement**

This equipment complies with IC RSS102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

Cet équipement est conforme aux limites d’exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.
## Technical Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Braille Display** | • 6 eight-dot standard-size braille cells  
                        • 2 six-dot large braille cells |
| **Ports**         | • 2 USB 2.0  
                        • Ethernet  
                        • 3.5-mm headphone jack |
| **Storage**       | • 16 GB                                                                |
| **Connectivity**  | • 2.4GHz and 5GHz Wi-Fi  
                        • Bluetooth 4.2, Bluetooth Low Energy |
| **Input Interface** | • 6-key Perkins-style keyboard, with additional navigation keys  
                                • Repeat button for tactile indication of device status  
                                • Feedback input through 2 six-dot, large braille cells |
| **Output Interface** | • Built-in speakers and headphone jack for audio instructions  
                                • Purple LED for power-status indication  
                                • Vibration motor for tactile feedback |
| **Electrical Parameters** | • Input to device: 12V 3.34A, 40W  
                                • Adapter AC socket: AC 100-240V, 50/60Hz, 1.0A |
### Technical Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>9.5” x 9.5” (24 cm x 24 cm x 5 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>2.3 lb (103 g)</td>
</tr>
<tr>
<td>Warranty</td>
<td>One-year limited parts and labor warranty</td>
</tr>
</tbody>
</table>

Environmental Consideration - Operating conditions - 41F to 104F (5C to 40C and 10% to 70% relative humidity)

Storage conditions - 32F to 122F (0C to 50C) and 10% to 90% relative humidity

### Warranty Statement

One year limited warranty. Please contact APH customer service for details.

Toll-Free: 800-223-1839 (U.S. and Canada)
Fax: 502-899-2284
Email: cs@aph.org
Hours: Monday–Friday 8:00am–8:00pm EST