Contents [hide]

tts Calibrating Bee Bot

Specifications

- **Name:** Bee-Bot or Blue-Bot
- **Calibration:** Manual calibration using a downloadable protractor
- **Video Guides**: Available for calibrating Bee-Bot and Blue-Bot

Getting started with Bee-Bot

This User Guide is designed to provide you with all the essential information you need to set up and begin using Bee-Bot in just a few simple steps. Whether you've used our robots before or you're a first-time user, our aim is to show you just how user-friendly and enjoyable to use our Bee-Bot is. In this guide, you will find:

- **Identifying your Bee-Bot Model** – how to identify your version of Bee-Bot so you know how to set up your device and what features are available.
- **Setup Instructions** – how to charge and turn onthe Bee-Bot.
- **Basic Features** – what Bee-Bot's buttons do and how to program Bee-Bot.
- **Basic Care Tips** – how to take care of Bee-Bot and keep it running smoothly.
- **Additional Resources** – links to other Bee-Bot documents with useful information.

Let's get started!

Identifying your Bee-Bot Model

Before we start, check to see which version of Bee-Bot you have. There will be a few differences in the setup and available features, depending on what version you have.

- If you have an older version of Bee-Bot (pre-2019), it will have two switches on its underside, which are for POWER and SOUND.
- If you have a newer, upgraded version of Bee-Bot (2019 onwards), it will have three switches on its underside. The additional switch is a SENSOR switch, which increases its functionality.

The set-up and features for both versions will be explained in this guide.

Set-up Instructions

Charging Bee-Bot

Before using your Bee-Bot, ensure that it has enough charge.

Please note: If you have one of the earliest (pre-2011) models of Bee-Bot, it will not have a USB port/charging socket and will need 3 x AA batteries to power it.

When replacing the 3 x AA batteries

- Turn the power slide switch (located on the base of Bee-Bot) to off.
- Use a coin to loosen the battery compartment.
- Replace all batteries at the same time – don't mix old batteries with new ones.

For further information and guidance about changing Bee-Bot's batteries, refer to your Bee-Bot Manual or you can download a copy by clicking here. If you have a newer model of Bee-Bot (post 2011), its eyes will indicate the state of charge of the battery by flashing and changing different colours. The table below shows what each light indicator means:

What do Bee-Bot's eye colours mean?	
Flashing red	Bee-Bot has a low battery and needs charging
Glowing solid red	Bee-Bot is charging

Glowing solid green	· Bee-Bot is fully charged and ready to use. · Bee-Bot's eyes will stop glowing green, the moment it is disconnected from the power source.

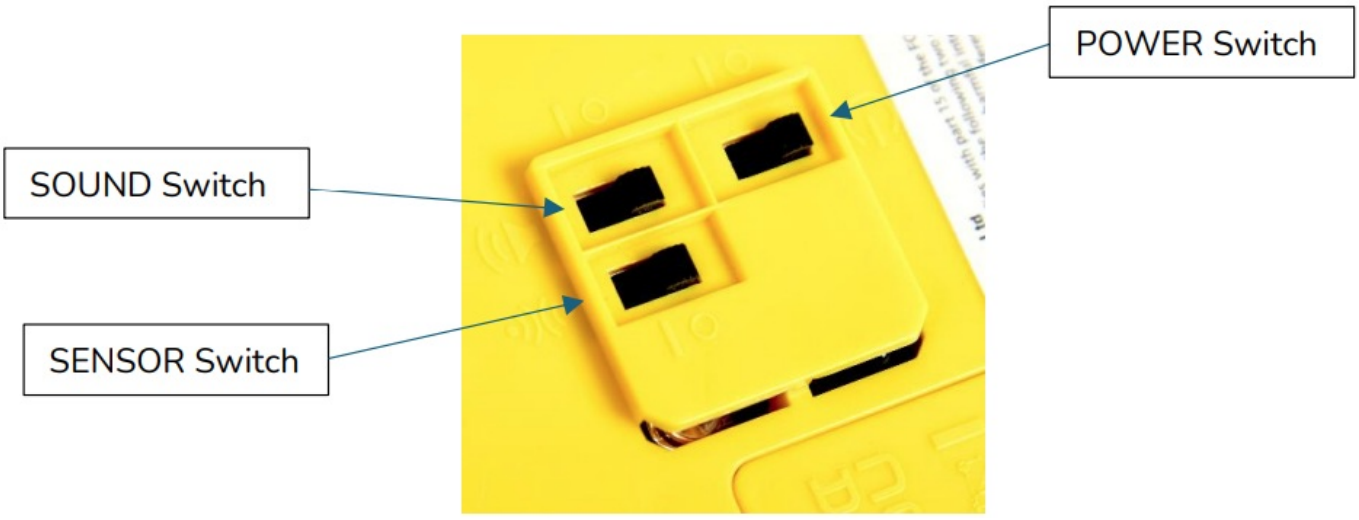
Important Charging Reminder: Please keep in mind that even if the Bee-Bot's eyes are not flashing red, it is still advisable to charge the device if you plan to use it for an extended period. This ensures optimal performance and prevents interruptions during activities.

- To charge, turn the Bee-Bot's power off and use the USB cable provided. Insert the cable into the charging socket on Bee-Bot (see diagram above) and connect the other end of the cable to a USB port on a PC, laptop or USB charging plug.
- Alternatively, if you have a Bee-Bot docking station, place Bee-Bot into the docking station and connect the power cable.
- It takes approximately 1-2 hours to charge and once fully charged will run for around 6 hours, and 1.5 hours when used continuously and not turned off.
- To help preserve the life of the battery, it is advisable to remove the Bee-Bot from charge, once it is fully charged.

Low Power Sleep Mode

- If Bee-Bot is unused for 2 minutes with the sensor switch turned ‘OFF’, Bee-Bot will make a sound and go into sleep mode.
- If you do not have a sensor switch on your Bee-Bot, it will also go into sleep mode after 2 minutes.
- If Bee-Bot is unused for 4 minutes with the sensor switch turned ‘ON’, Bee-Bot will make a sound and go into sleep mode.
- Pressing any of Bee-Bot’s buttons will wake Bee-Bot from sleep mode. It will make a sound and flash its eyes.

How to switch Bee-Bot on



As the diagram shows, there are three switches located underneath Bee-Bot:

- a power slide switch
- a sound slide switch
- a sensor slide switch.

Please Note: If you have an older version of Bee-Bot (pre-2019), it will not have a sensor slide switch.

- A switch is turned on if it is next to the ‘I’ symbol the underneath of the Bee-Bot.
- A switch is turned off if it is next to the ‘0’ symbol the underneath of the Bee-Bot.

Please Note: Older models of Bee-Bot may have ‘on’ and ‘off’ written above the power slide switch and sound slide switch, rather than the ‘I’ and ‘o’ symbol.Sliding on each switch will do the following:

Power Switch	· Turning on the power switch will allow you to use the command buttons on top of Bee-Bot and make it move. · When you turn on the power switch, Bee-Bot's eyes will glow white.
Sound Switch	If you turn on the sound switch, Bee-Bot will make a sound when: · you turn the power switch on. · you press each command button. · it has completed a command or set of commands.
Sensor Switch	· Turning on the sensor switch enables Bee-Bot to detect other Bee-Bots and Blue-Bots. · Turning on the sensor also allows users to record and listen to their own sounds.

Basic Features

As you can see from the diagram above, Bee-Bot has a set of coloured, command buttons on the top of its case:

- four orange buttons
- two blue buttons
- one green button.

Each button has a symbol on it showing the function of the button.

The Green ‘Go’ Button

This button is pressed when all the commands have been inputted using the orange buttons. When the green button is pressed, Bee-Bot will carry out the commands in the order that they have been inputted.

The Orange Buttons

The orange buttons are the direction command buttons.When pressed, the Bee-Bot is instructed to move in the direction indicated on the button.

	**Forward** Button	Press the forward button and Bee-Bot will be instructed to move 15cm forwards.
	**Backward** Button	Press the backward button and Bee-Bot will be instructed to move 15cm backwards.
	**Right Turn** Button	Press the right turn button and Bee-Bot will turn 90 degrees to the right.
	**Left Turn** Button	Press the left turn button and Bee-Bot will turn 90 degrees to the left.

Things to note

- If you press any of the direction buttons or pause button more than once in succession, Bee-Bot will execute that command for each press. For example, if you press the forward button twice, followed by the green ‘Go’ button, Bee-Bot will move forward 15cm, followed by another 15cm forward.
- To move Bee-Bot to the right or left, remember to add a forward or backward step, after the turn step. For example, pressing the ‘right turn’ button, followed by the ‘forward’ button, then the ‘Go’ button, will instruct Bee-Bot to turn 90 degrees to the right then move forward 15cm.
- Bee-Bot is pre-programmed to always move in 15cm steps.

The Blue Buttons

	**Pause** Button	Pressing the pause button will instruct Bee-Bot to pause for 1 second during a sequence of commands.
	**Delete** Button	Pressing the delete button will delete all the steps so a new sequence can be programmed.

Each press of an orange direction button or pause button adds that command to Bee-Bot's memory, and when the 'Go' button is pressed, Bee-Bot executes all stored commands in sequence.

Bee-Bot's Lights and Sound

The table below shows the light and sound effects that Bee-Bot makes when used:

Action	**Light and Sound Effect**
When a command button is pressed.	Bee-Bot flashes its eyes once and makes a short beep sound.
When a command is performed by Bee-Bot.	Bee-Bot flashes its eyes once and makes a short beep sound.
When a set of commands are performed and completed by Bee-Bot.	Bee-Bot flashes its eyes three times and makes t hree longer beep sounds.

Top Tips for Using Bee-Bot

Ensure a Flat Surface

Make sure the surface you are using is flat and free of raised areas. Uneven surfaces

can hinder the movement of the Bee-Bot.

Check the Wheels

Inspect Bee-Bot's wheels for any debris. Foreign objects can interfere with its movement.

Delete Previous Commands

After the Bee-Bot has completed a set of commands, it is essential to press the delete button (blue X button), before inputting a new set of commands. If this step is overlooked, Bee-Bot will carry out all the commands stored in its memory, which may result in it moving in an undesired direction.

Voice Recording

To record and listen to audio, follow these simple steps:

1. **Choose the button**
   Select the button on Bee-Bot that you want to record audio for.
2. **Start Recording**
   Press and hold the button for 2 seconds until you hear a single beep.
3. **Record Your Audio**
   Speak or make a sound close to the Bee-Bot before the double beep sounds.
4. **End of Recording**
   The recording time has ended once you hear the double beep.
5. **Playback**
   When you press the button, the audio recording will replace the usual beep sound.
6. **Repeat**
   To record audio on any other button, repeat the above steps.

Basic Care Tips

- **Cleaning:** Use a clean, damp cloth to wipe the Bee-Bot gently.
- **Storage and Usage**: Keep Bee-Bot away from direct sunlight and heat sources to prevent damage.
- **Liquid Exposure**: Avoid contact with water or other liquids, as this can harm the device.

- **Static Discharge:** If the Bee-bot malfunctions due to static discharge, turn it off and then back on to reset it.
- **Battery Care and Maintenance**: Ensure the battery hatch is secured with the security screw provided, especially after replacing the battery or batteries.

Additional Resources

- For troubleshooting tips and answers to frequently asked questions, see our Bee-Bot FAQ document.
- For activity ideas on how to use Bee-Bot to teach across the primary curriculum, see our Bee-Bot Cross-Curricular Activity Ideas.

Conclusion

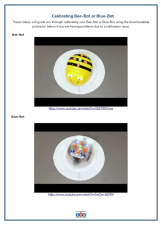
Thank you for taking the time to explore the Bee-Bot Teacher User Guide. We hope you found this information helpful as you begin your journey with Bee-Bot. As you introduce Bee-Bot to your pupils, remember that the key to success lies in exploration and creativity. Encourage your learners to experiment with programming, debug their commands, and collaborate with their peers. By fostering a playful learning environment, you can help them develop crucial skills in problem-solving and computational thinking. We hope you enjoy your adventures with Bee-Bot!

FAQ

What should I do if I encounter calibration issues despite following the videos?

If you are still facing calibration problems after following the video guides, please reach out to our customer support for further assistance.

Documents / Resources

	tts Calibrating Bee Bot [pdf] Instructions Calibrating Bee Bot, Bee Bot, Bot

References

- User Manual

Bee Bot, Bot, Calibrating Bee Bot,

tts tts

Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

Search:

e.g. whirlpool wrf535swhz Search