Getting Started with Loti-Bot: User Guide

This User Guide is designed to provide you with all of the essential information you need to set up and begin using Loti-Bot in just a few simple steps. Whether you've used TTS robots before or you are a first-time user, our aim is to show you just how user-friendly and enjoyable to use Loti-Bot is.

In this guide, you will find information about:

- **Setup Instructions -** Charging and turning on Loti-Bot
- **Features** – all the different features of Loti-Bot
- **Connecting Loti-Bot** – how to connect Loti-Bot to the Tablet App, WebApp or the TTS Tactile Reader Pro
- **Programming Loti-Bot** – an overview of how to program Loti-Bot using the Loti-Bot App or the TTS Tactile Reader Pro

Setup Instructions

Charging Loti-Bot

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

Here is a charging checklist:

- Turn off the power to charge.
- Loti-Bot will not work whilst charging.
- The charging port is located on the back of Loti-Bot.
- Use the cable provided with your Loti-Bot to charge.
- Loti-Bot's sidelights will be red whilst charging and will turn green when fully charged.
- Top-tip – be sure that your tablet or Tactile Reader Pro is also charged and ready to go!

Turning Loti-Bot on and off

- The switch to turn Loti-Bot on or off is located on the underneath of the robot.
- To turn on, slide the switch to the **I** position
- To turn off, slide the switch to the **O** position.
- When you turn on Loti-Bot, it will complete a 360° turn to calibrate its position.
- You can also turn on/off the sound for Loti-Bot using the volume switch.

Loti-Bot Features

Loti-Bot was designed with a translucent shell, so that parts such as the wiring and circuit board can be seen inside, helping children to remember that there are electrical components that enable robots to work.

Loti-Bot has many different functions and features:

- Two programmable, colour changing LED sidelights
- Two programmable LED headlights
- Manual pen holder – for drawing as Loti-Bot travels
- Bumper sensors
- Proximity sensors
- Temperature sensor
- Light (lux) sensor
- Cliff edge sensor – to prevent Loti-Bot from falling off the edge of a table
- Buddy detection sensor – which detects other Loti-Bots, Blue-Bots and Bee-Bots
- Microphone
- Speaker
- 20 pre-loaded sounds

There is also a compass within the app, so you can program Loti-Bot based on location.

All programmable elements can be programmed within the Loti-Bot Tablet App, Web App or with the TTS Tactile Reader Pro.

Loti-Bot's Pen Holder

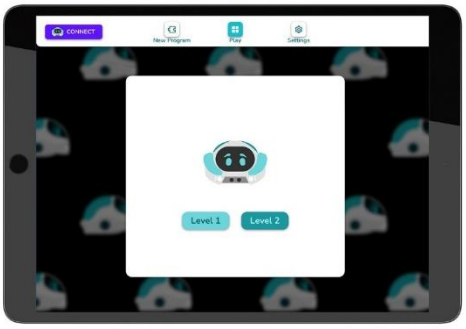
Loti-Bot has a manual pen holder, which you can twist up and down to enable Loti-bot to draw whilst travelling around.
Below is a helpful diagram with measurements to show the pen size that will fit perfectly in Loti-Bot and should be used.
Please remember to take off the lid before putting into Loti-Bot, otherwise they can get stuck.

Connecting Loti-Bot

Loti-Bot is programmed and controlled by using either the Loti-Bot Tablet App, WebApp or the TTS Tactile Reader Pro.

Connecting Loti-Bot to a tablet:

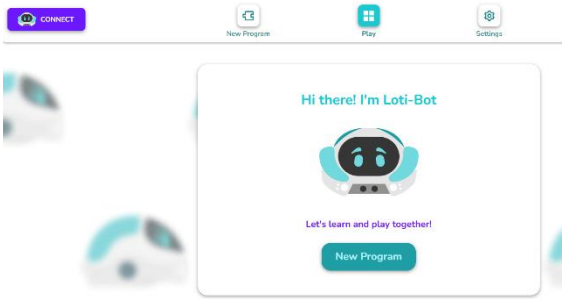
- Turn your Loti-Bot on to make it discoverable to your device.
- On your tablet, make sure that Bluetooth is on (this is how Loti-Bot connects).
- In the Loti-Bot App, press the CONNECT button in the top left-hand corner.
- You will see a searching screen and the tablet will connect to the nearest, switched on Loti-Bot.



Top tip: Try to turn on and connect each Loti-Bot in turn if connecting multiple Bots to different tablets.
When using the app, you can also rename your Loti-Bots!

Connecting Loti-Bot in the Web App:

- If you do not have a tablet, you can also connect to Loti-bot through the web based app.
- Enter the URL into the browser.
- Turn your Loti-Bot on to make it discoverable to your device.
- On your device, make sure that Bluetooth is on (this is how Loti-Bot connects).
- In the Loti-Bot Web App, press the CONNECT button in the top left-hand corner.
- You will see a searching screen and the tablet will connect to the nearest switched-on Loti-Bot.



Connecting to TTS Tactile Reader Pro

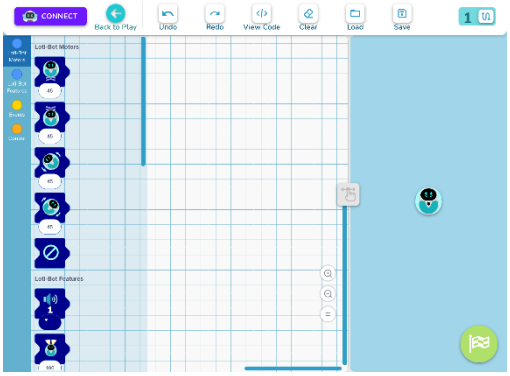
- Turn your Loti-Bot and Tactile Reader Pro on.
- Press the blue Bluetooth button on the Tactile Reader Pro.
- The Tactile Reader Pro will connect to the closest switched-on Loti-Bot.
- When the connection is made, the LEDs underneath the tactile reader tile slots will go teal and Loti-Bot's sidelights will flash dark blue.

Programming Loti-Bot

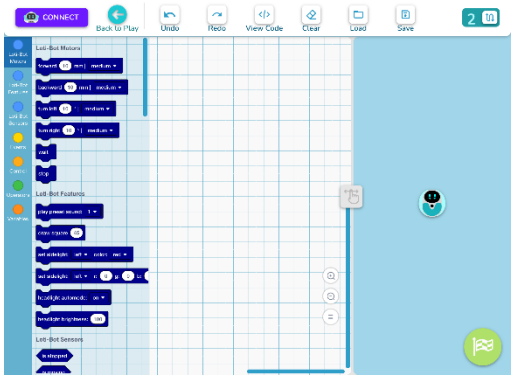
Loti-Bot can be programmed in the Loti-Bot Tablet App, using the Web App, or via a *screen-free* option with the Tactile Reader Pro.

Programming in the Loti-Bot Tablet App

There are two levels two choose from within the Tablet App.



- **Level 1:** This is designed as an introductory level to block-based coding. The blocks appear as large blocks with images to represent the actions. There is also a reduced selection of blocks to support and not overwhelm children. In level 1, children can program Loti-Bots movements, lights and sounds.
  There is also the simulation screen to the right of the programming grid, so that children can test out their code if needed. When connected to a Loti-Bot and they press the green flag, both the simulation and the Loti-Bot robot will carry out the program.



- **Level 2:** This level is a block-based coding environment. Where children can use blocks to program all aspects of Loti-Bot including Motors, Features and Sensors, and with blocks including Events, Control, Operators and Variables.
  There is the simulation screen to the right of the programming grid, so that children can test out their code if needed. When connected to a Loti-Bot and they press the green flag, both the simulation and the Loti-Bot robot will carry out the program.

When programming with the Loti-Bot in the app, children can see a live feed of the data collected by Loti-Bots sensors, such as light or sound. This could be used to develop observational skills, for example as Loti-Bot moves around the classroom, children can watch the data change with light levels increasing or decreasing.

If children want Loti-Bot to draw, they can use the manual twist pen holder to drop the pen. They may want to include a pause in their sequence to allow them to do this.

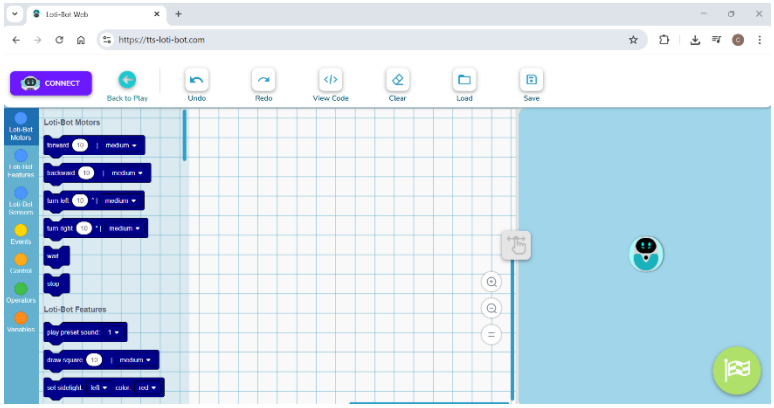
Within the Tablet App, children can also save their code. This will save to the app on that tablet and could be loaded again on the same tablet next time.

If children are not connected to a Loti-Bot then the simulation will still move. This could be helpful to test out code before connecting to a Loti-Bot to see it in real life action!

Programming in the Loti-Bot Web App

In the Loti-Bot Web App, there is the block-based coding environment for children to explore.

- Children can use the blocks to program all aspects of Loti-Bot including Motors, Features and Sensors, and with blocks including Events, Control, Operators and Variables. There is the simulation screen to the right of the programming grid, so that children can test out their code if needed. When connected to a Loti-Bot and they press the green flag, both the simulation and the Loti-Bot robot will carry out the program.



When programming with the Loti-Bot in the app, children can see a live feed of the data collected by Loti-Bots sensors, such as light or sound. This could be used to develop observational skills, for example as Loti-Bot moves around the classroom, children can watch the data change with light levels increasing or decreasing.

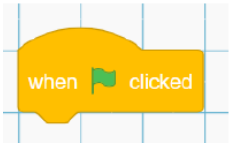
If children want Loti-Bot to draw, they can use the manual twist pen holder to drop the pen. They may want to include a pause in their sequence to allow them to do this.

Within the Web App, children can also save their code. This will save into the devices downloads and so could be sent or shared to a friend to try, printed or loaded again if needed in a future session.

Within the app, if children are not connected to a Loti-Bot then the simulation will still move. This could be helpful to test out code before connecting to a Loti-Bot to see it in real life action!

Starter Tip

The **green flag** button in the bottom right corner is used to tell Loti-Bot that you want to start executing the program. Press this when you are ready! Every program must begin with a curved yellow block like this.



*For more examples of code and how to program with the different blocks, please see the **Loti-Bot Skill Builder Download.***

Programming with the Tactile Reader Pro

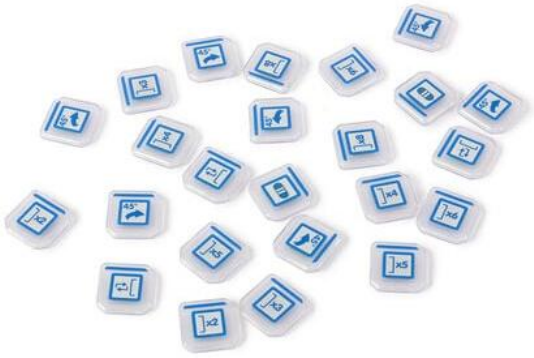
Programming with the Tactile Reader Pro offers an engaging screen-free experience for coding and computational thinking.

- Children simply plan their program, place the tiles which each represent a different command into the Tactile Reader Pro and then press the green button to execute their program.
- They can watch as Loti-Bot moves through each command. Each tile lights up when working through the sequence.
- Children can then easily swap out or move any tiles to quickly debug their program.
- It is also possible to daisy chain up to three Tactile Reader Pros at one time, enabling children to create longer sequences.

The Tiles

- With the Standard Tile Pack, you can program Loti-Bot to move forward, backwards, left, right and pause.
- With the Loti-Bot Tiles Pack, there are additional tiles so that children can also program Loti-Bot's RGB LEDs, play sounds and control Loti-Bots headlights.
- With the Extenstion Tile Pack, children can introduce more complex concepts into their programming. The pack, includes tiles for 45-degree turns (left and right) as well as tiles to explore repeat loops (Repeat Start and Repeat End) and pauses.

Loti-Bot Tiles Pack



Extension Tile Pack