Edison Robots V.2 Helpful Tips and Tricks

This document is a great place to start if you ever experience any trouble with the line tracking barcodes on the Edison robots. Edison robots are used in different programs we offer such as the Coding Edison Robots Series and Ready, Set, Move!

Please note: Some of the information may not be relevant to you (i.e., Ready, Set, Move! Presenters can ignore the EdBlocks/EdScratch information).

Tips and tricks for Line Tracking:

- Always start the robot on the white/light background, not on the line. It must first detect the light background before "finding" the dark line to follow.
- Set the Edison to the LEFT of the line - Edisons tend to search to the right, or circle to the right when they are searching.
- Ensure the line is dark enough - you need the contrast between the light paper and dark line for Edison to sense a difference. If the marker is drying out, the line may not be dark enough.
- Only use non-glossy paper - students can remove the sheets from the page protectors in their duotangs (Edison Robotics kits) to get a better reading on the barcodes or for using the line detection circle provided. There does not seem to be any issues with the barcodes on the keyring.
- Avoid running the line tracking programs in very bright light, such as direct sunlight, as this can negatively affect the program.
- Check that there is still a line tracking sensor on the bottom of the robot - if not, add one from your spare parts bag.
- Check that the sensor on the bottom is not "scuffed up" - this may negatively impact how well the sensor works, making it difficult for the Edison to sense the line.

If you are running an EdBlocks or EdScratch field trip, you will also need to check the code to ensure you have the line tracking sensor turned on!

Each kit with Edison robots should have:

- Spare parts - this contains extra sensors, wheels and other parts for the Edisons. If you do not have one in your kit, please order one!
- Calibration barcodes - this page contains Drive calibration and Obstacle calibration codes and instructions. This has been helpful for Edisons acting up during the line detection activity. Again, if you do not have these codes in your kit, please order one!

There are lots of resources for both V.2 and V.3 Edison robots, as well as EdBlocks and EdScratch, on the Meet Edison website - https://meetedison.com/edison-robot-support/ . You can also check our their tips and troubleshooting information for reference.

We hope this helps, and if you have any other issues or questions, please ask our office!