

Edison Robot Troubleshooting

While Edison robots are designed to be user-friendly and intuitive straight out of the box, occasional issues, common to any computing device, may arise. Explore these troubleshooting tips to swiftly resolve any queries you might encounter.

Check the browser

Checking that Edison's USB cable is pushed all the way into your device's USB-A port. Then, check that the browser you are using to program Edison is Google Chrome, Microsoft Edge or Opera.

Check the connectivity status

If this error is visible 'There seems to be a network issue accessing the compiler' message after pressing the 'Program' button in the app, or if the program failed to download successfully, you will need to check the app's connectivity status.

To check your connection open 'Menu' in the upper left-hand corner and select 'Help'. This will open a pop-up which includes the option to 'Run the connection checker'. Click this button to check your connection. If the connection test result shows 'NO SERVER FOUND' then you may be behind a firewall. To fix the problem, contact your network administrator and ask that them to unblock ports 80, 8080, 443 and 8443 and white list these addresses:

- <u>https://www.edscratchapp.com</u>
- <u>https://www.edblocksapp.com</u>
- <u>https://www.edpyapp.com</u>
- https://api.edisonrobotics.net
- 52.8.213.196
- 13.210.175.93
- 52.52.42.133

iPad screen flasher not downloading

The iPad screen flasher download uses the iPad's screen to flash the program's code to the line tracking sensor. A few things can affect how well this works.

- Ambient Light Move away from any bright direct and indirect sunlight.
- Screen brightness setting experiment with different brightness levels between 50% and 100%
- Age of iPad Older iPads have slower screens. Set the speed setting to 'reliable'
- No USB-A port If your computer only has USB-C ports you will need a USB-C to USB-A adaptor.

Drive troubleshooting

If you are having trouble with how Edison is driving, such as the robot is not driving straight, you will need to perform a drive calibration on the robot.

Full instructions and the resources you need for your version robot can be found at <u>https://meetedison.com/edison-robot-support/drive-calibration/</u>



Line tracking troubleshooting

If you are having trouble with a line tracking program, check the following:

- Only use non-glossy paper and, if laminating the paper, only use a matte-finish laminate. Edison will be best able to follow a line if that line is a very dark color (such as black),
- approximately 1.5cm (0.6 inches) wide and found on a white background.
- Always start the robot on the white background, never on the line itself.
- Avoid running line tracking programs in very bright light, such as sunlight, as this can
- negatively affect the program.
- Double-check your program to ensure you have the line tracking sensor turned on.

Obstacle detection troubleshooting

If you are having trouble with an obstacle detection program, check the following:

- Ensure that your Edison robot's obstacle detection is properly calibrated using the barcode and instructions available at https://meetedison.com/obstacle-detection-calibration/.
- Edison will be best able to detect obstacles which are opaque but not too dark (e.g. not black) and at least as tall as Edison.
- Avoid running obstacle detection programs in very bright light, such as sunlight, as this can negatively affect the program.
- All of the Edison programming languages except for EdBlocks and the barcodes require the obstacle detection sensor to be turned on to work. Double-check your program to ensure you have the obstacle detection sensor turned on.