

# Introduction

The REV Control System is an affordable robotics control platform providing the interfaces required for building robots. These devices are most commonly used within the FIRST Tech Challenge (FTC), FIRST Global Challenge (FGC), and in the classroom for educational purposes.

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## How to use this documentation?

This documentation is intended as the place to answer any questions related to the REV Robotics Control System, used in the FIRST Tech Challenge and FIRST Global Challenge.

- **Looking to get an idea of how to use the system before your Control Hub arrives?** Reading through each section will help, but we specifically recommend the guides on [getting started with the Control Hub](#) and the [programming language options](#) section.
- **Have a specific question?** Feel free to head straight to it using the navigation bar to the left. Each section is grouped with other topics that are similar.
- **Having trouble finding what you are looking for?** Try the search bar in the upper right or read the section descriptions below to find the best fit.

Getting started building robots can be an intimidating process. The following documentation is here to make getting started a bit easier. There are a number of examples to get started with the Control System and we are committed to adding content to make it more accessible for people to use REV.

If there is a question that is not answered by this space, send our support team an email; [support@revrobotics.com](mailto:support@revrobotics.com). We are happy to help point you in the right direction.

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## What is in each section?

### Control System Overview

This section contains information regarding all of the major mechanical specifications of the REV [Control Hub](#) and [Expansion Hub](#). These sections include [port pinout](#) information, [protection features](#), and the [types of cables](#) used with the devices.

## Getting Started

Take the Control Hub or Expansion Hub from out of the box through generating the first configuration file. This includes the process for changing your Control Hub's [Name](#) and [Password](#) as well as [pairing to your Driver Station](#). Also includes information on ways to add additional motors to the Control System through adding a [SPARKmini Motor Controller](#) or an [Expansion Hub](#).

## Managing the Control System

This section covers how the information needed to keep your Control System up to date and how to [troubleshoot your Control System](#) if issues arise.

## Programming

From just getting started by writing your [first Op Mode](#) to working with [closed loop control](#), this section covers the information needed to start programming.

## Sensors

[Sensors](#) are often vital for robots to gather information about the world around them. Use this section to find how to use REV sensors and information on the different sensor types.