

## Note to the Teacher

---

This learning activity provides two sets of parallel lessons on remote control. The first set of lessons utilizes a simple remote control test bed, while the second set uses the Squarebot that is seen throughout the programming material. Since the lesson sets are almost exactly the same, it would not be appropriate for students to complete each one. Instead, the teachers must select the set that best fits their schedule and classroom goals.

The test bed was designed to be assembled quickly. Therefore, this lesson set is best suited for teachers who only have limited class time. This lesson is also favorable for students who are less interested in construction; it gets to the material on remote control as quickly as possible. The first lesson deals with four functions on the transmitter options menu: Config, Reverse, Scale, and Drive. The second lesson deals with the remaining transmitter options: Edit Pt, Trim, and P Mix. The third lesson deals with jumpers and manipulating the Vex controller through hardware changes. It is important to complete the lessons in the correct order, because the concepts and questions in each lesson build on those in the one that preceded it.

Squarebot, on the other hand, takes a considerable amount of time to build. The Squarebot lesson set would be preferable for instructors who have more class time available. The structure of these lessons mirrors that of the test bed lessons, so it remains important to move through the lessons in the appropriate order.

There are two benefits to teaching remote control with Squarebot rather than with the test bed. First, many of the control options taught in the lesson were created specifically for a vehicular robot. At times, these options are not equally useful or engaging when applied to the test bed. Second, the Squarebot is used in many of the programming lessons, which means that the investment of time can prove useful beyond the scope of this particular lesson.

---