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The Robot Program Episode 001: Revolution JD Box Contents

This lesson will introduce the contents of the **Revolution JD** robot kit. Follow along with **The Robot Program Episode 001: Revolution JD Box Contents**. At the end of this lesson, readers will be able to identify the parts of the robot, the charging components, the **Getting Started Guide**, and where to find more information.

View the video episode here: https://www.ez-robot.com/Tutorials/Lesson/53

Last Updated: 6/12/2018

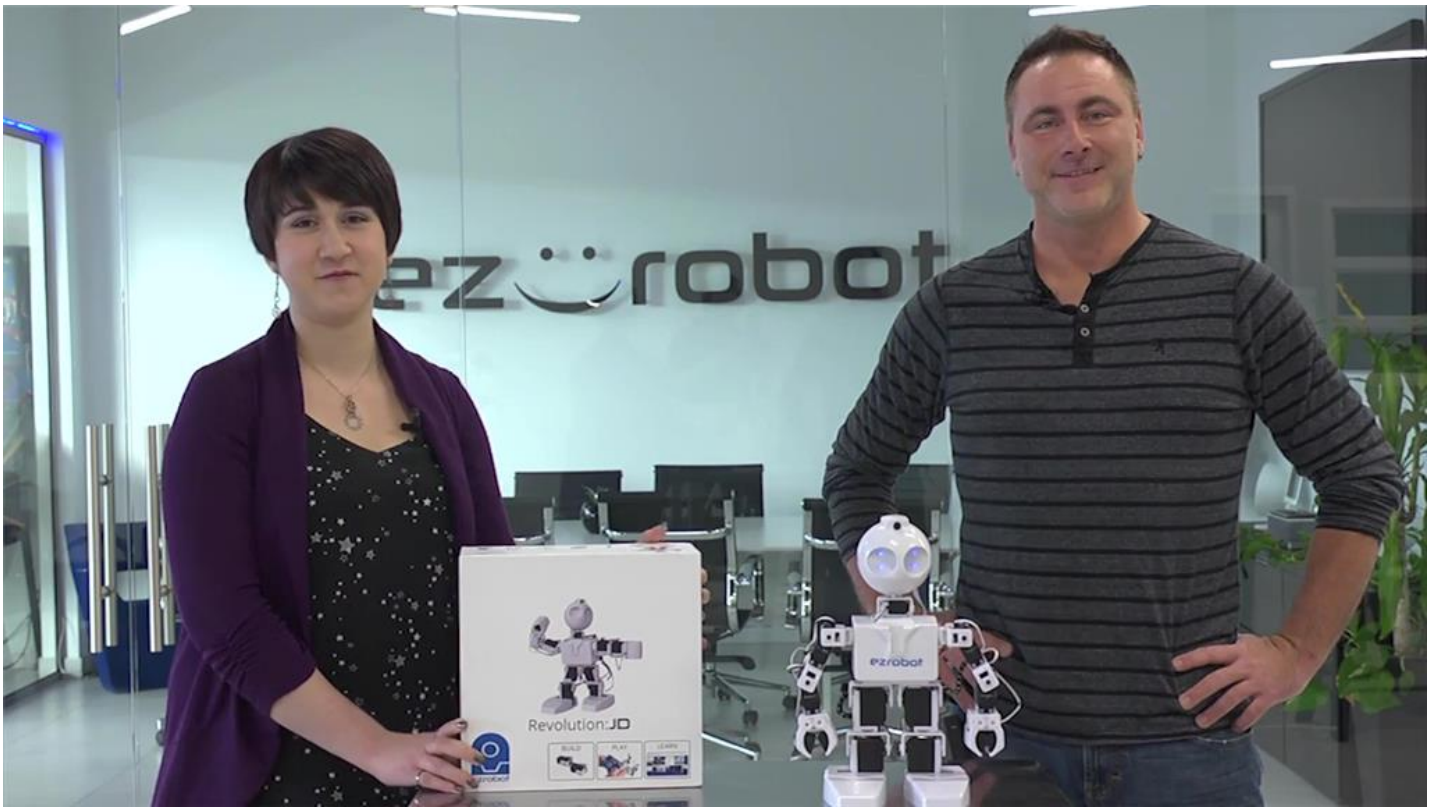
Professor E's Overview

Important information and online links can be viewed in the **Getting Started Guide**.

JD is a humanoid robot that uses two legs for movement.

The parts reviewed in this lesson include:

- A **Humanoid Head** and **Humanoid Body**
- The **EZ-B Robot Controller**
- Six **Lever Servos** that act as motorized robot joints
- Two **Humanoid Feet** for bipedal movement
- Two **Grippers** that allow the robot to hold items
- The **Wire Wraps** will be used to organize the cables of the robot
- Battery charging components



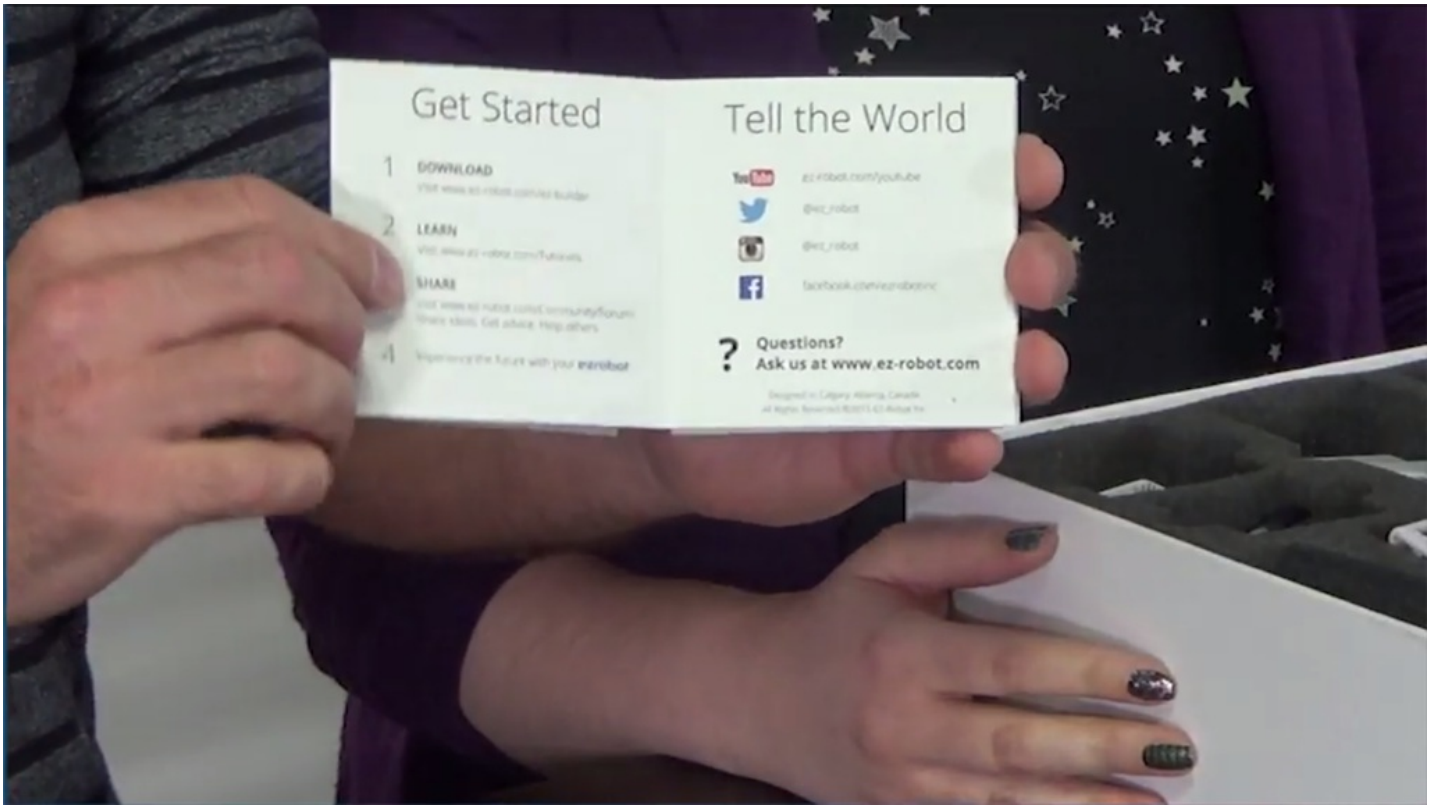
Step 1

Welcome to the **Revolution JD** robot kit. **JD** is a humanoid robot, meaning a robot with human-like features.



Step 2

The **Getting Started Guide** gives an overview of important information. This guide also includes links to online resources, and contains a detailed diagram of the **EZ-B v4 Robot Controller**, which will be helpful for future lessons on building the robot.



Step 3

The **Humanoid Head Assembly** has a camera that provides peripheral information. The camera is a type of computer peripheral, which are devices that provide input information that can be analyzed or used to make decisions.



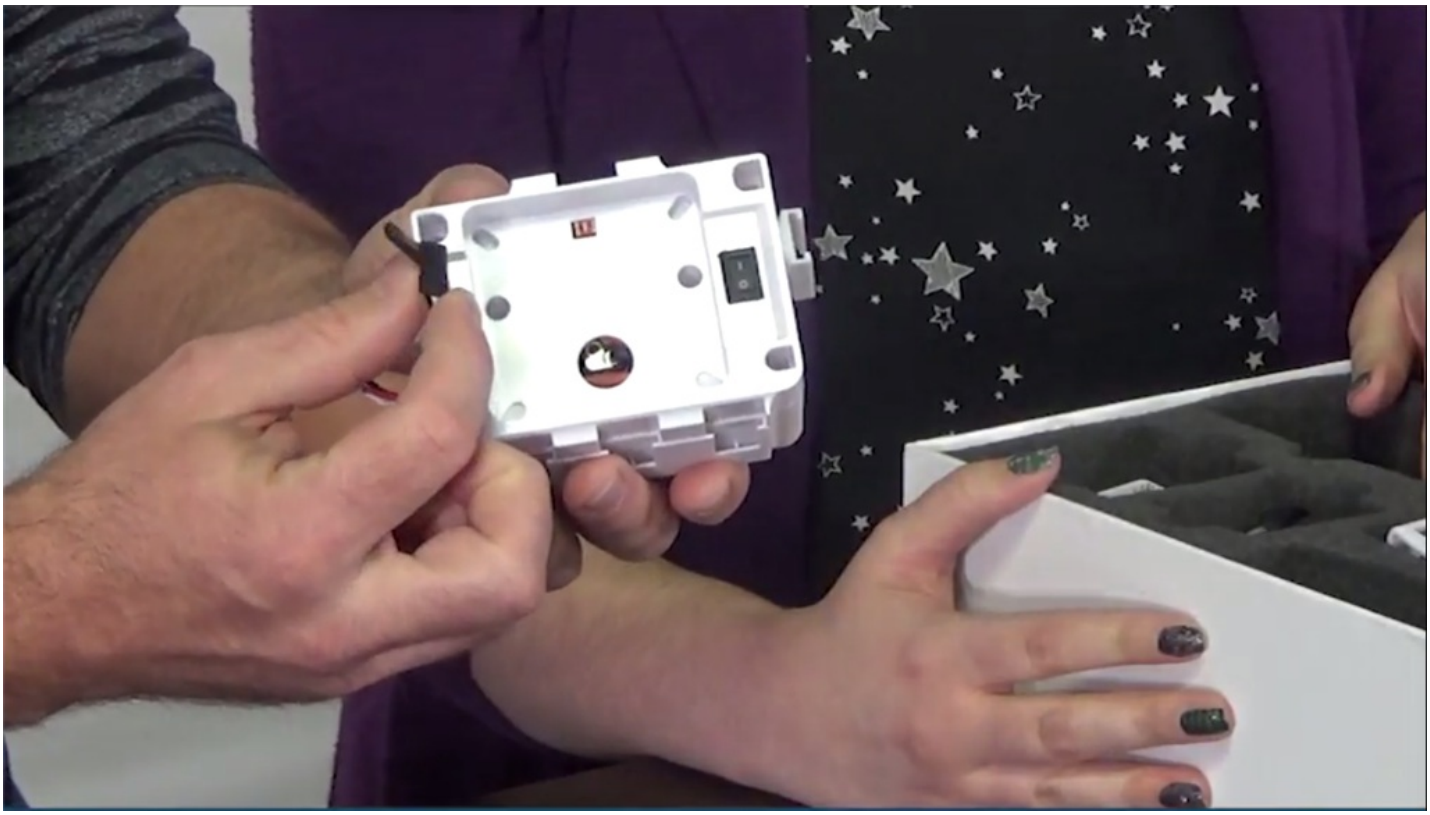
Step 4

The **RGB Eyes** are a peripheral that can be programmed to show different colors and patterns. The **Head Assembly** uses servos to move horizontally and vertically. Servos are a type of motor that can be controlled for specific positions and angles.



Step 5

The **Humanoid Body** has two shoulder servos, which control rotational movement for the right and left shoulders. The body also houses the power switch and a contained **LiPo Battery**.



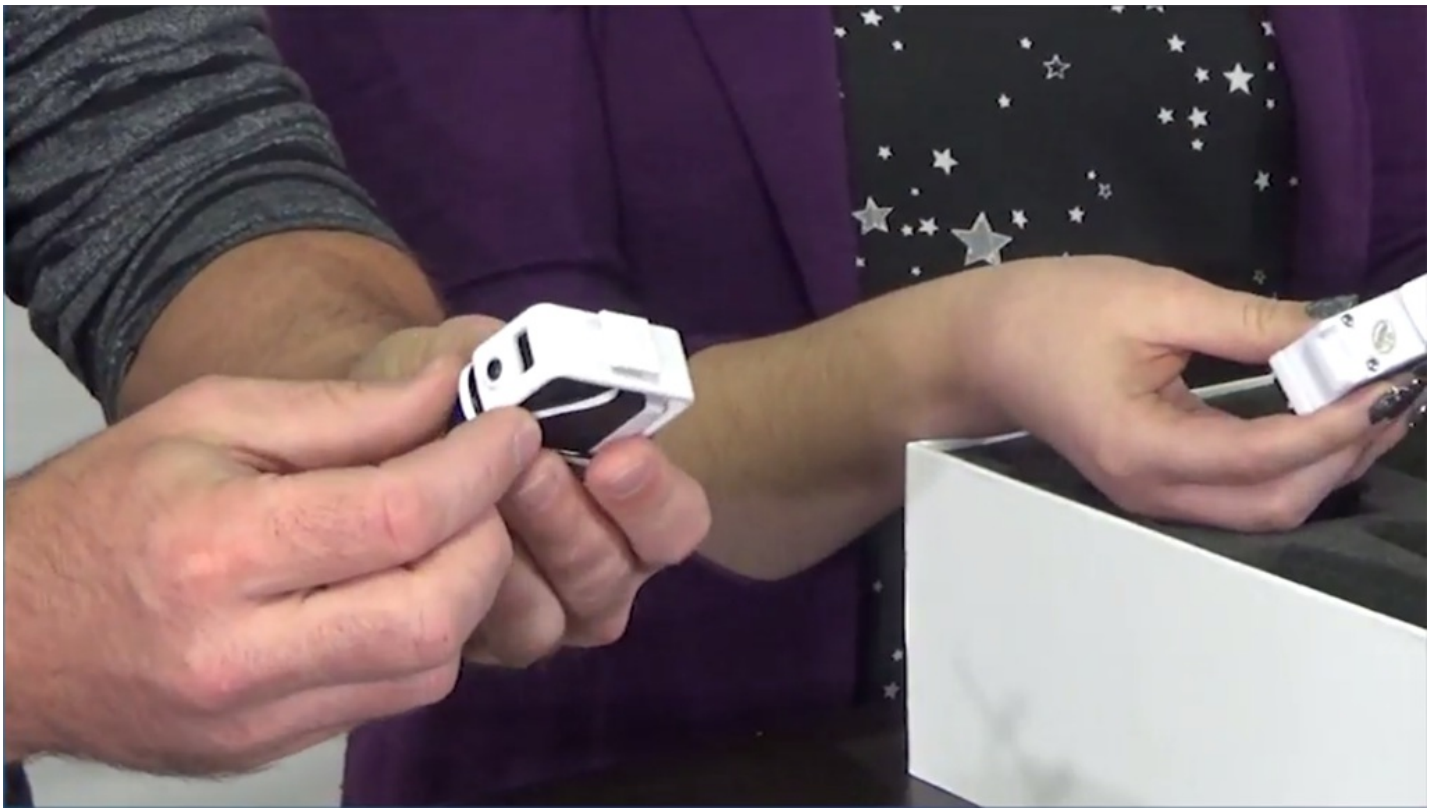
Step 6

The **EZ-B v4 Robot Controller** houses an internal speaker and all of the connection ports. It acts as the processing brain for the robot. The controller connects to the computer using Wi-Fi.



Step 7

Lever Servos act as joints for robot movement control. Each servo can move through a 180-degree arc of motion. The **Revolution JD** kit contains six servos that will be added to the robot.



Step 8

JD uses two **Humanoid Feet** for bipedal movement, each containing two internal servos. These servos control the knee and ankle movements.



Step 9

Robots have grippers instead of hands. **JDâ€™s Servo Grippers** are lined with foam.



Step 10

Wire Wraps can be used to organize the connection cables and prevent restricted or impeded robot movement.



Step 11

Review charging in **Episode 005**, using the included charger, transformer, and international adapters.



Quiz

Question #1 What type of robot is JD?

Question #2 Which type of component acts like joints for the robotâ€™s movement?

Question #3 What do robots use to hold items instead of hands?

View the answers to this quiz at www.ez-robot.com/Tutorials/Lesson/53.

Visit www.TheRobotProgram.com for more episodes.