

## The Robot Program Episode 001: Revolution JD Box Contents

This lesson will introduce the contents of the [b]Revolution JD[/b] robot kit. Follow along with [b]The Robot Program Episode 001: Revolution JD Box Contents[/b]. At the end of this lesson, readers will be able to identify the parts of the robot, the charging components, the [b]Getting Started Guide[/b], and where to find more information. View the video episode here: <https://www.ez-robot.com/Tutorials/Lesson/53>

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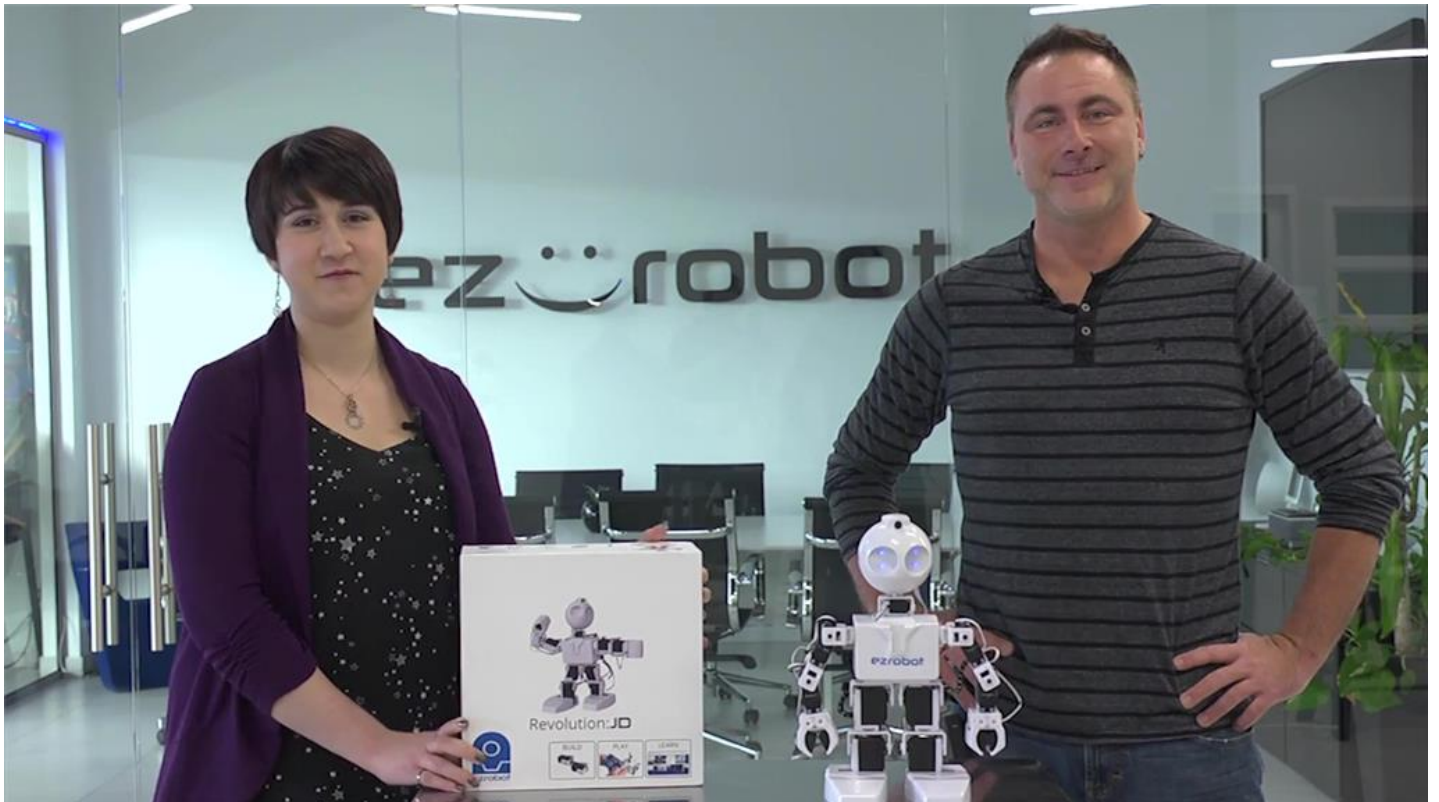
## Professor E's Overview

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



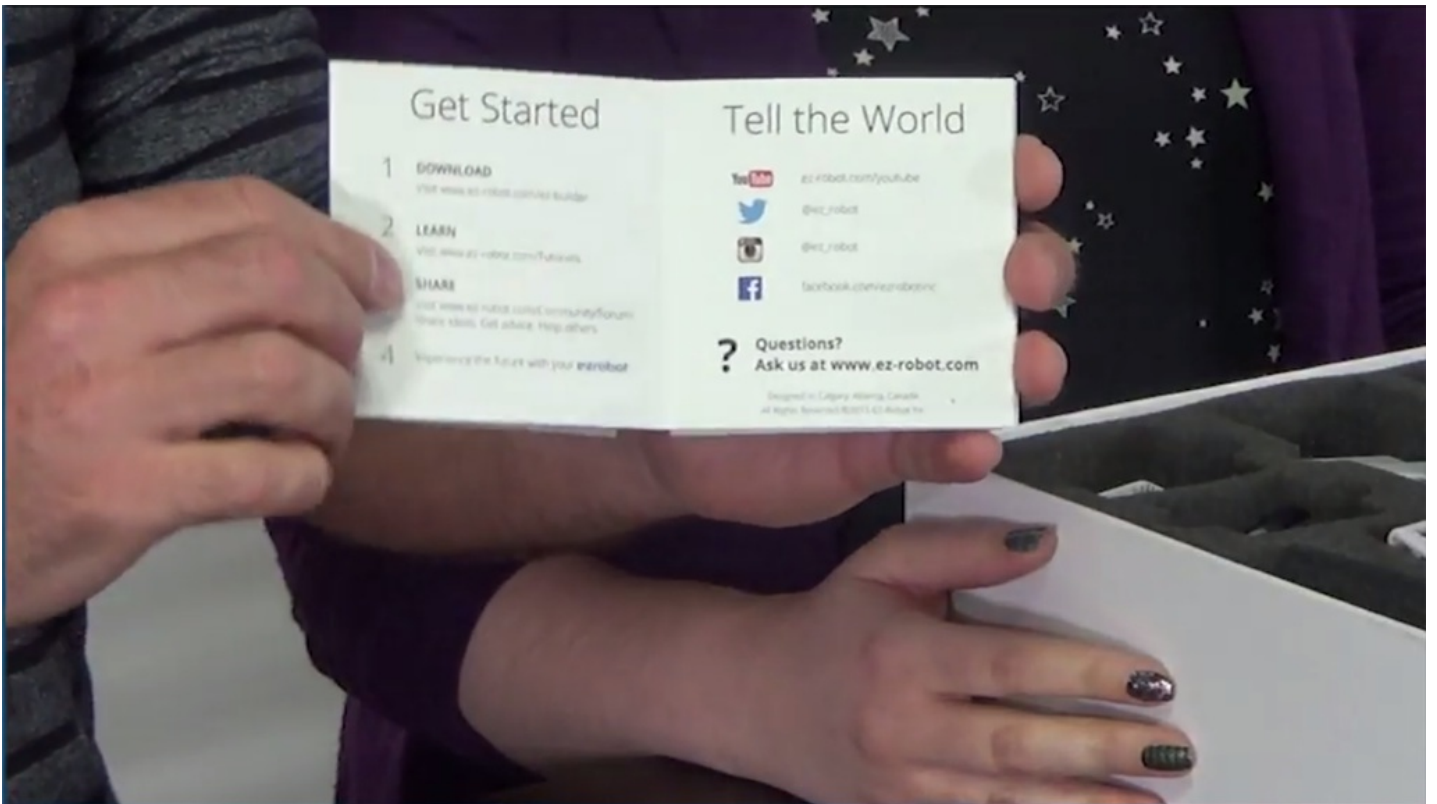
## Step 1

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.



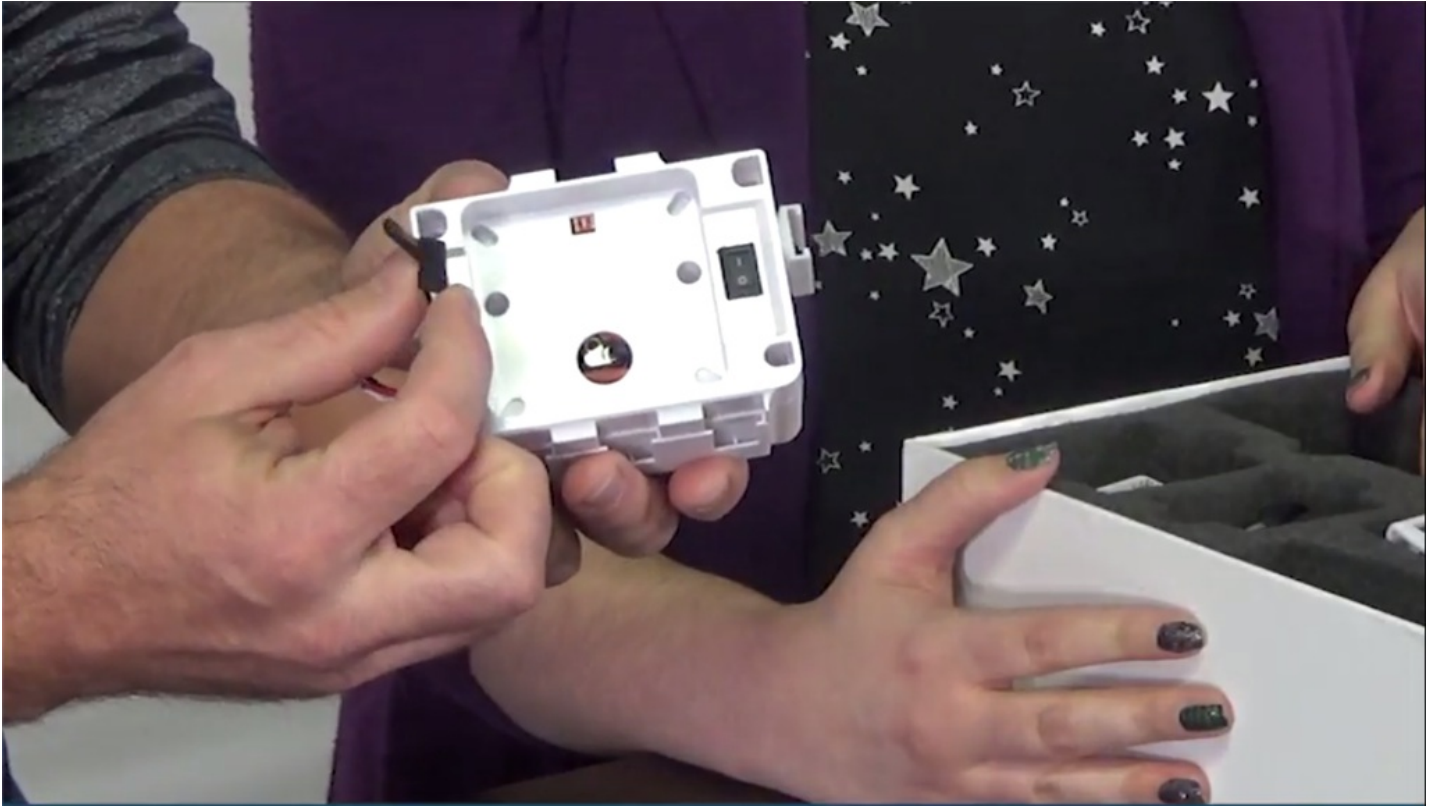
## Step 4

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

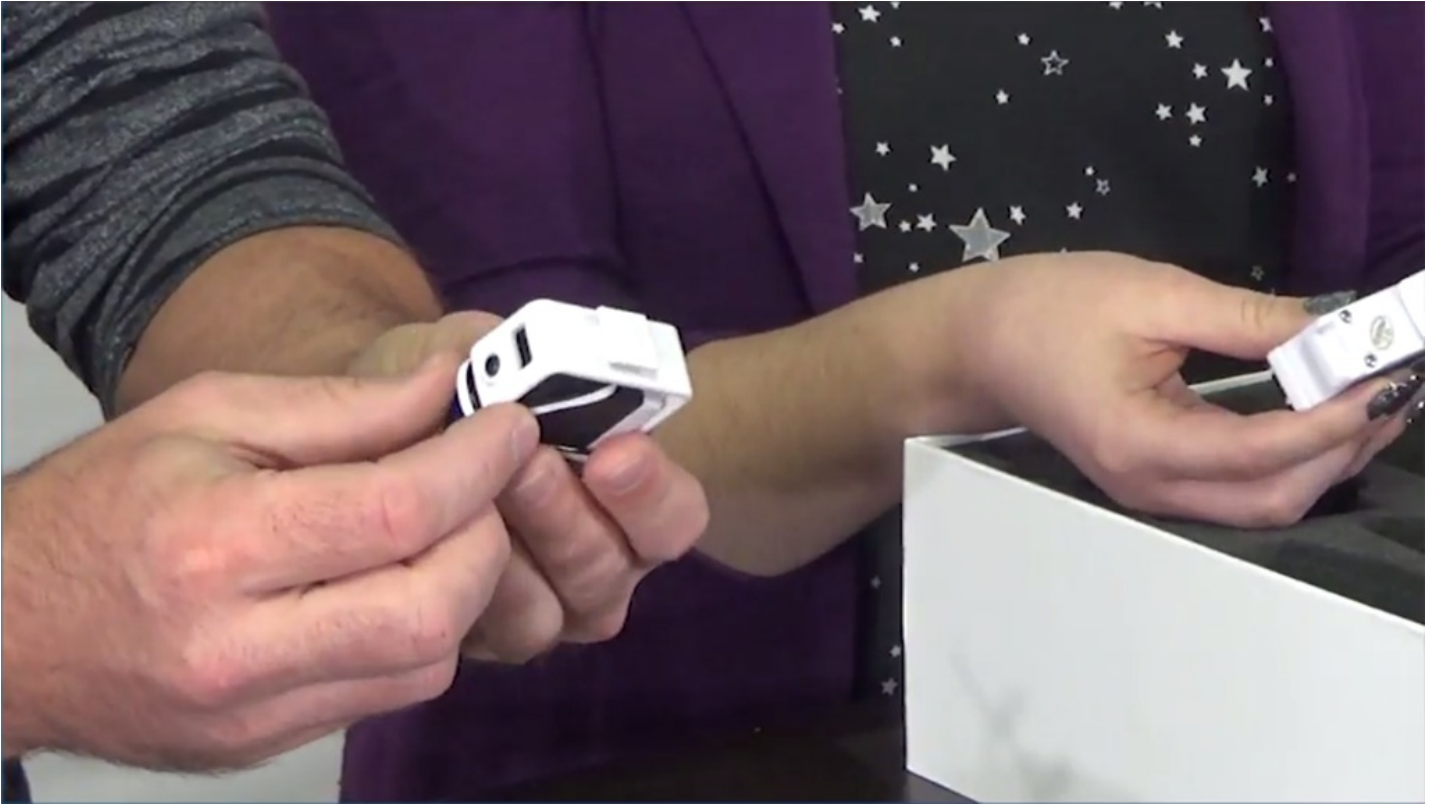
The **EZ-B v4 Robot Controller** houses an internal speaker and all of the connection ports. It acts as the processing brain for the robot. The controller connects to the computer using Wi-Fi.





## 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. **JDâC™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.



**Question #1**

What type of robot is JD?

**Question #2**

Which type of component acts like joints for the robot'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](http://www.ez-robot.com/Tutorials/Lesson/53).

Visit [www.TheRobotProgram.com](http://www.TheRobotProgram.com) for more episodes.