

Bioloid Robots that Appear in the QuickStart

>>**Beginner Level Robots:** Robots with 4 and less joints that can be assembled with Beginner kit [\(Footnote 1\)](#).

Beginner Level Robots



>>**Intermediate Level Robots:** Robots with 8 and less joints that can be assembled with Comprehensive kit [\(Footnote 2\)](#). If you want to assemble intermediate level robots with a Beginner kit, you need to purchase four Dynamixels (AX-12) additionally.

Intermediate Level Robots



>>**Advanced Level Robot:** Robots with 18 and less joints that can be assembled with Comprehensive kit. If you want to assemble advanced level robots with Beginner kit, you need to purchase frame set [\(Footnote 3\)](#) and Dynamixels (AX-12) additionally.

Advanced Level Robots



In addition, you can assemble various robots in more creative ways. We also provide Expert Level kit that has systematic education process.

[Footnote 1] Beginner kit: AX-12(4 pcs), AX-S1, CM-5, Frames, Rechargeable Batteries, SMPS, QuickStart, CD

[Footnote 2] Comprehensive kit: AX-12(18 pcs), AX-S1, CM-5, Frames, Rechargeable Batteries, SMPS, QuickStart, CD

[Footnote 3] Frame set: Frames(Comprehensive kit), QuickStart(Comprehensive kit)

Kits you need to make robots

Beginner kit

Beginner kit

+

AX-12
X 4

Comprehensive
kit

OR

Beginner
kit

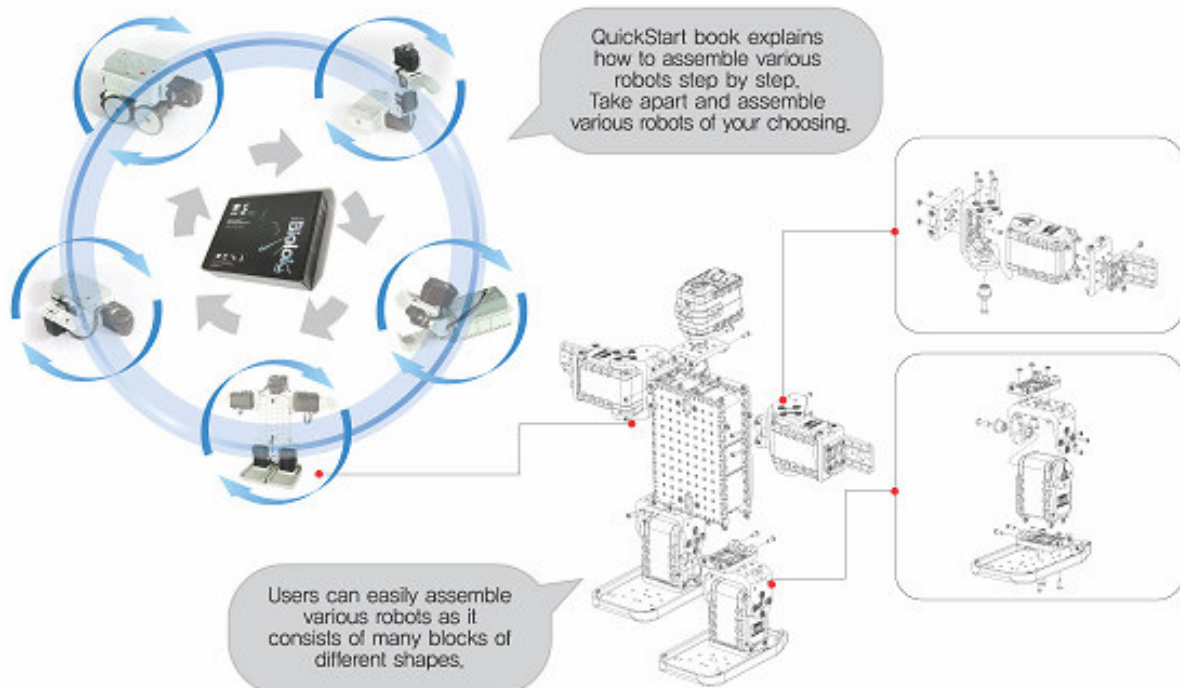
+

AX-12
X 14

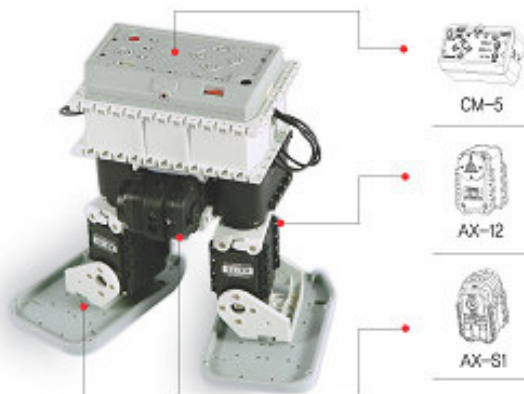
Frame set

Educational Robot Kit **Bioloid**

Bioloid is an all-around robot kit that assists users in developing their creativity and scientific mind. Make sure to read the precautions in the manual before assembling robots. Beginners should assemble the beginner-level robots first.



► Bioloid Parts



Main Controller, CM-5

The main controller of Bioloid robot. Using assembly parts, you can set up the robots by connecting Dynamixel (actuator module, sensor module) to a CM-5.

CM-5

Robot Exclusive Actuator, Dynamixel AX-12

Actuator module that functions as joint of robot. It is a two-way (Bilateral) communication servo driven by network and has endless turn mode.

AX-12

Robot Exclusive Sensor Module, Dynamixel AX-S1

Dynamixel sensor module AX-S1 consists of three pairs of sensors that detect distance, brightness and heat, it also has many other functions such as sound detector, remote transceiver and sound buzzer as well.

AX-S1



Assembly Parts

Various frames, cables and bolts that connect CM-5, AX-12 and AX-S1 to assemble robot.

Matters to Know Beforehand

■ Bioloid Instructions

There are two instructions, and one of them, User's Guide, is provided through CD.



QuickStart

QuickStart explains how to assemble and operate robots quickly, and how to download a program. Printed QuickStart book is provided for your convenience.



User's Guide

User's Guide explains the operating principle and the program process of Bioloid robot in detail. Once mastered, the users can assemble robots in any styles that you like. The User's Guide (PDF document) is included in the CD.

■ The Contents of Bioloid's CD



- Software : Programs that needs to be installed in PC in order to operate Bioloid robot.
- Manual : QuickStart, User's Guide and manual for the Dynamixel (AX-12, AX-S1).
- Applied Robots : Various programs and video clips for Bioloid robots.
- Examples : Robot program sources that are explained in the User's Guide.
- Help Files : Help documents and video clips that assist in operating Bioloid robots.

■ Installing Software

Install following programs from the software folder of CD.



Behavior Control Programmer

Software that programs the behavior motion of the robots.



3D Motion Editor

Software that edits the motion of robots in 3D graphic.

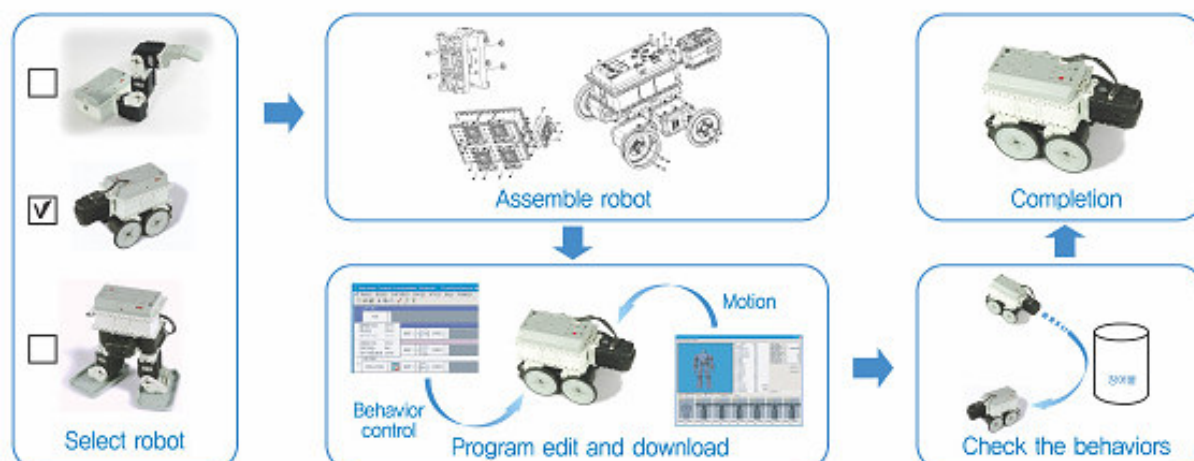


Robot Terminal

Serial communication software for advanced control, such as setup configuration and others for Dynamixel.

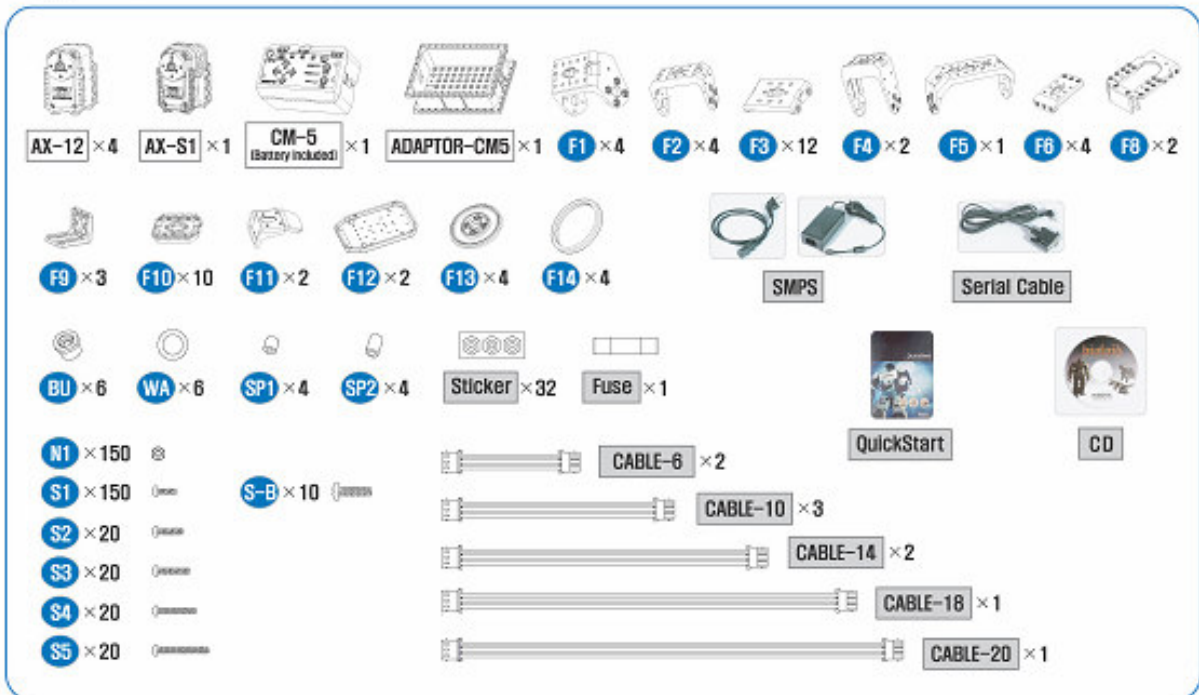
Robot Making Process with Bioloid

First of all, follow the QuickStart in assembling robots. If you want to know more about the detailed principles that make up the robots, refer to the User's Guide. After thoroughly mastering the User's Guide for underlying principles, you can design and program the robots in any way you like.



ROBOTIS

Beginner Kit's Parts



Comprehensive Kit's Parts

