Lesson 1 Introduction to MechDog

1. Description

MechDog is an entry-level desktop quadruped robot dog. It features an ESP32 main controller and eight hollow cup high-speed servos, with a linkage design for its legs. It incorporates a fully self-developed dynamic balance algorithm, allowing flexible transitions between various complex gaits, making its movements more agile and fluid.

Despite its lightweight body, MechDog integrates ultrasonic sensors, an IMU, and expandable sensor interfaces. It supports multiple programming languages including MicroPython, Scratch, and Arduino. The official resources include comprehensive learning and development materials as well as real-person video tutorials, making it easy to embark on your robot dog development journey.
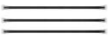
2. Packing List

2.1 Standard Kit

MechDog robot dog (assembled)	Hand expansion bracket	8.4V 2A charger	Android data cable (1000mm)	Screwdriver	Accessory bag	User manual

2.2 Advanced Kit

MechDog robot dog (assembled)	Hand expansion bracket	8.4V 2A charger	Android data cable (1000mm)	Screwdriver	ESP32 S3 vision module	Vision module mounting bracket
MP3 module (TF card included)	Dot matrix module	Touch sensor	Light sensor	Card reader	Colored balls	USB cable
Module wires (200mm)	Accessory bag	User manual				