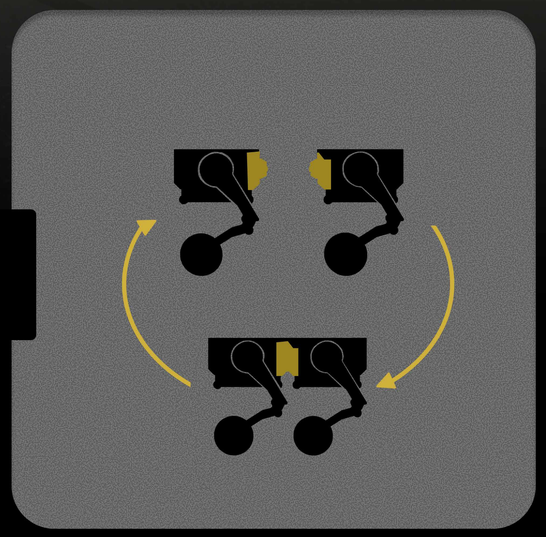
Direct Drive Tech 本末科技

D1

D-INFINITE

The World's First Fully Modular Embodied Intelligent Robot

Direct Drive Tech has established a unified hardware "Bottom Up" framework for embodied intelligent robots. Grounded in the concept of multi-collaboration and multi-locomotion, 'D-infinite' (D1) introduces an innovative paradigm in both hardware and software design for the embodied cerebellum. This groundbreaking concept provides a fresh perspective on addressing the application dilemmas faced by embodied robots.



【Key Features】

Docking free, Unlimited Form

D-infinite can switch into different forms, including biped, quadruped， bipedal-wheeled, quadruped-wheeled etc. Allowing it to build an agile and flexible motion system that excels in challenging scenarios, opening up new possibilities and unlocking a wider range of functions.

Unlocking Locomotion Potential with Multi-Form Capabilities

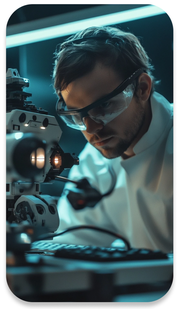
In crawling mode, D-infinite achieves a maximum payload of 100kg. Even in standing mode, it maintains an exceptional load capacity of 80kg. This robust design provides a stable and efficient platform for both the "brain" computing unit and the "cerebellum" executive module, ensuring reliable performance during complex missions.

Extended Running Time, Beyond Range Anxiety

In wheeled-legged mode, the continuous runtime is ≥5h unloaded with a range exceeding 25km. This significant upgrade extends single-mission duration for applications such as outdoor patrol, supply transportation scene-based services, reducing the frequency of mid-task recharging and improving the overall efficiency.

Type	Parameter	Value
Funtion & Parameter	Stand Size	375/750 x 600 x 600
	Crawl Size	375/750 x 600 x 260
	Material	Aluminium+Plastics
	Weight	24.3kg / 48.5kg
	Processor	Standard：Jetson Orin NX 8GB
	Battery Parameter	43.2V9Ah（453.6Wh）in one robot
	Hardware Interface	0~40USB Type C x 2，Ether-net x 1，battery interface x 1
	Remote Power Off	yes
	Working Time	>5h Bipedal Unload
	Working Distance	25km Bipedal Unload
	Charging Time	<2h
	Crawl Mode Driving Load	>80kg
	Maximum Speed	3m/s
	Obstacle Climbing	Maximum 70 cm, 50cm Suggested
	Operating System	Ubuntu 22.04
	API	ROS 2
Others	OTA	yes
	Arm Attachment	TBU
	Camera Attachment	TBU
	Power Board Attachment	TBU
	Big Wheel Attachment	TBU

【Applications】


Research & Development

Security Patrol

Short-distance Delivery

Emergency Rescue

Mobile Filming

Official Website

Youtub

Website：http://directdrive.com

Email：marketing@directdrivetech.com

Robot Business Hotline：+86-18027032561

Address：9th Floor, Building 1, No. 11, Daxue Road, Songshan Lake, Dongguan City, Guangdong Province