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Good Tech, Korea

'Educational Training System-01'

Global business company
Leading laboratory equipment manufacturer
Practical teaching materials linked to commercial products

ISO 9001
(Certificate no Q155314)

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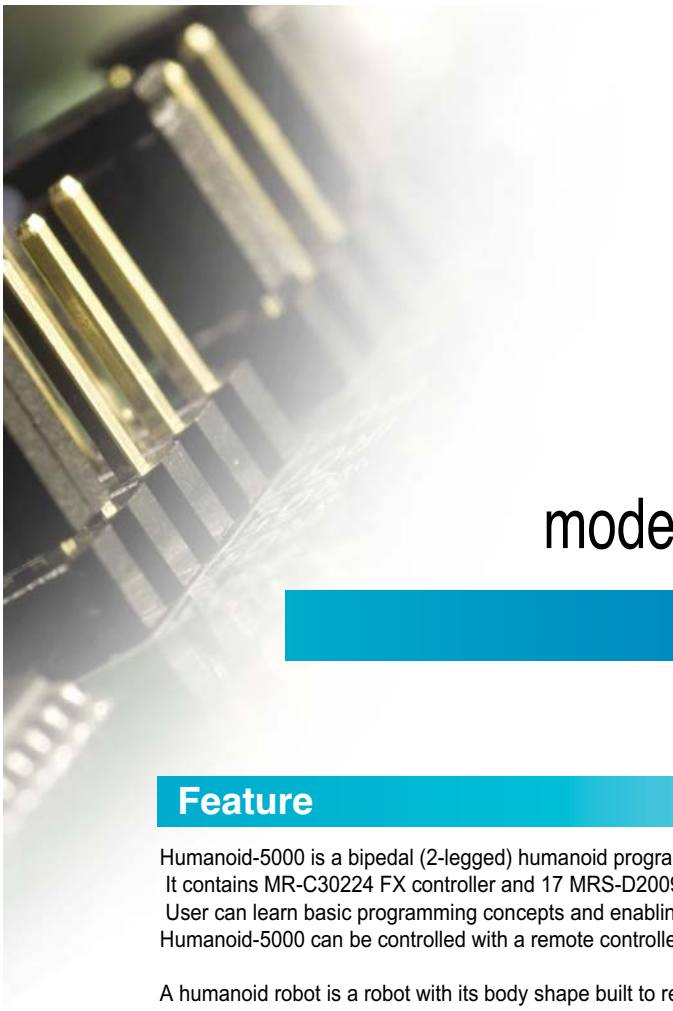


model:Humanoid-5000

Humanoid Robot Trainer

Feature

Humanoid-5000 is a bipedal (2-legged) humanoid programmable walking robot designed for educational needs.
It contains MR-C30224 FX controller and 17 MRS-D2009SP servomotors,,, etc
User can learn basic programming concepts and enabling themselves to perform more sophisticated actions.
Humanoid-5000 can be controlled with a remote controller, and can detect the objects and speak.

A humanoid robot is a robot with its body shape built to resemble the human body.
The design of Humanoid-5000 is for functional purposes, such as various programming to learn tha basic of interacting with human tools and environments, for experimental purposes, such as the study of bipedal locomotion, or for other purposes.
Humanoid-5000 robot has a torso, a head, two arms, and two legs,,, etc

There many C-language programming courses for webcam service using Raspberry-pi module,,, etc
* Humanoid-5000 Robot Pan/Tilt Service Programming
* Humanoid-5000 ROBOT BUILT-IN MOTION PROGRAMMING
* Humanoid-5000 ROBOT DRIVE PROGRAMMING
* Humanoid-5000 ROBOT SENSOR PROGRAMMING
* Humanoid-5000 ROBOT CAMERA PROGRAMMING ,,, etc

The course will help you get started and ignite user's knowledge in robotics field while building your basic programming skills.

Functions

1) Various robot functions are built in.
User can precisely adjust joints and enable various robot's actions:
    (1) Walking
    (2) Image recognition
    (3) Obstacle detection
    (4) Distance measurement
    (5) Voice generation
2) Simple robot control using remote controller.
3) Computer based control using C-language programming ;
    (1) Programming MF Bumper application
    (2) Making robot move
    (3) Making robot speak
    (4) Programming MF PlayMotionSoundLed Service Application
    (5) Calculating the distance value of obstacles
    (6) Programming DRIVE Service Application,,, etc.
    (7) Programming practice for webcam service using Raspberry-pi module.
4) Total system including frame, controller, UI software, Power, Sensor is provided.
5) User can create new motions & functions using MSRDS VPL.
6) Strong holding torque as all parts are manufactured in aluminum.

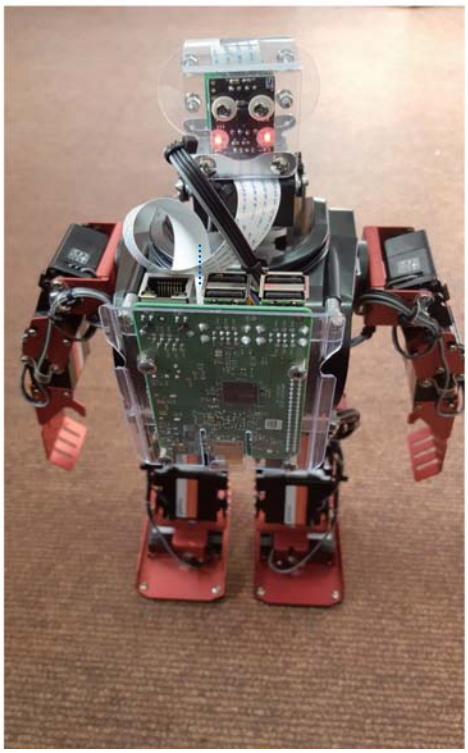
Components

Humanoid-5000, robot kit	1 unit
Adaptor	1 ea
Remocon	1 ea
Manual book	1 book
LAN Cable	1 ea
Data cable	1 ea

System cinfiguration

(front side)

(back side)



Programmable & walking robot

Specifications

Dimensions	310×180×90 (L×H×W)
weight	1.5kg
controllers	MR-C3024 FX, Servomoters
driver module	LCD
A/D converter	8 Channel
Ports	32 I/O digital, 3 PWM, 8 analog-digital converters
USB Hub	Port:4; power: 3.3V~5V
Communication	IR interface, 3V
Bluetooth	38×45×35mm, Output:3.3V~5V, USB,
Antenna	7.3pi
Charger	Input: AC 100V~220V 50~60Hz, Output: DC6V 1000mA
Motor	MRS-D2009SP
UART	high speed serial connection
DRC camera	1.3 pixel
Raspberry-pi module	for webcam service & programming

Training contents

Chap 1 Humanoid-5000 Robot Pan/Tilt Service Programming

1.1 Humanoid-5000PanTilt function

1.1.1 Humanoid-5000 robot Raspberry pi setting

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1.2.1 Move the Humanoid-5000 robot head left and right

1.2.2 Move the Humanoid-5000 robot head up and down

1.2.3 Move the Humanoid-5000 robot

1.2.4 Move the Humanoid-5000 robot 4 times up and down

1.2.5 Move the Humanoid-5000 robot 2 times left and right

Chap 2 Humanoid-5000 robot built-in motion programming

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2.2 Examples of Humanoid-5000 robot Motions programming applications

2.2.1 Play Humanoid-5000 robot Dance(33~64) motions

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2.2.3 Play Humanoid-5000 robot Game(97~ 128) motions

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2.2.6 Play Humanoid-5000 robot built-in sounds

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Chap 3 Humanoid-5000 robot drive programming

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3.2 Examples of Humanoid-5000 robot Drive programming applications

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Chap 4 Humanoid-5000 robot Sensor programming

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5.1.3 Reduce and print camera images

5.1.4 Gray image output

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5.1.7 Humanoid5000 Head Left and Right Face Tracking .