



Overview

A 610 page book with 80 D.I.Y exercises to take your electronics expertise from beginner to an advanced level. Welcome to the what's next textbook, thank you all for your support and belief in electronics!

For over a decade, we have produced quality hardware and educational materials to teach about them. Our mission has always been to introduce you to the next generation of tools that enable everyone to quickly translate ideas and concepts into the physical world. We believe artists and engineers can share knowledge to create interactive and exciting inventions! This is the idea of technology we want to spread, what will be your next step?

The kit includes

1 The yellow D.I.Y. book

1 YELLOW board

1 RED board

1 Ethernet shield

1 Optoelectronic components box*

1 Integrated circuits box*

1 Passives and semiconductors box*

1 Connectors and power box*

1 Car kit box*

1 Modules box*

1 Motors box*

*details about the exact content of the box are on the next page

Optoelectronics components box

1x 7-segment display (Common Cathode)
1x 8x8 LED matrix display (Common Cathode)
3x TCRT5000 Reflective optical sensor
5x Green LED – 5mm
5x Yellow LED – 5mm
5x Red LED – 5mm
5x Blue LED – 5mm
5x White LED – 5mm
1x TSOP2238 IR receiver
1x TSAL5100 940nm IR LED

Integrated circuits box

1x ATMEGA328P microcontroller
1x 74HC595N shift register
1x 74LS164 shift register
1x LM358N operational amplifier
1x MAX7219 LED driver
1x TIP120 Darlington transistor
1x 10µF capacitor
1x Condenser microphone

Passives and semiconductors box

6x Piezoelectric sounder
1x Joystick
1x 16 MHz crystal resonator
1x 1N4007 diode
1x 1N4148 diode
1x Light Dependent Resistor (LDR)
1x Resistors set
2x 100nF capacitor
1x 10µF capacitor
2x 22pF capacitor
1x 6x6mm push button
6x 5,1V Zener Diode
2x 100nF capacitor
2x 10kΩ potentiometer
2x Plastic potentiometer shaft

Connectors and Power box

1x 8-battery (AA type) holder
1x 4-battery (AA type) holder
1x Wall AC adapter 5V/4A
1x USB to MIDI adapter
1x Breadboard and wires kit
1x USB A/B cable
1x 5-pin DIN socket

Car kit box

1x Wheels and rubber tyres set
1x Robot car Plexiglass frame set
1x Screws and nuts set
1x 16x2 character LCD
2x Geared motor

Modules box

1x DHT11 temperature/humidity sensor module
1x 4x4 alphanumeric keypad
1x 4-channel capacitive touch module
1x HC-05 or HC-06 Bluetooth module
1x I2C LCD controller
1x IR remote
1x L298N motor control module
1x RFID-RC522 module
2x Mifare Classic tag
1x PIR sensor module
1x SRF04 or SRF05 ultrasonic range finder
1x 16x2 character LCD

Motors box

2x Micro Servo
1x DC Motor
1x Red and Black Wires, Male-Male
1x plastic horn set