

RFID TRAINING SYSTEM (GOTT IOT CLOUD READY)

Model Number: GOTT-RFIDTS-01









DESCRIPTION

GOTT RFID Training System is designed to enable teachers and students to learn simple and complicated experiments (relating with RFID), which are close to life. By performing these experiments, students can clearly know the principles behind some common phenomena and apply them well. There is 2 optional for main control board, whether we choose using Arduino (GOTT-RFIDTS-01) or Raspberry PI (GOTT-RFIDTS-02). For instance, you may make your own password lock and entrance card system after learning the corresponding lessons. Besides, students can explore more experiments by themselves to strengthen the basics that they have learnt.

FEATURES

• GOTT-RFIDTS-01 includes an RFID module and many basic components, modules, for you to learn Arduino and electronic basics

CODE

400-230

CODE

CODE

- Include High Quality UNO R3 Controller Board and Sensors, 100% compatible with Arduino UNO R3, Arduino kit.
- Arduino lot Icloud ready

PRODUCT MODULES

LED MODULE

CODE 400-202

CODE

400-203

CODE

400-223

3 kind color of LED, 4 pcs LED Yello w, Green, and Red



7 SEGMENT DISPLAY

Common Cathode)

PHOTO RESISTOR

incident light intensity

1 Digit Seven Segment Display

STEPPER MOTOR

The stepper motor is a four-phase one, which uses a unipolarity DC power supply



12C LCD 1602

TEMPERATURE

12C LCD 1602 Display, Operating voltages used are +5 V or +3.3 V



400-204



400-224 **SENSOR LM35** Use LM 35 as a temperature sensor



ACTIVE BUZZER

Produces sound once connect to power, with power light and indicator of digital signal output.



74HC595

The 74HC595 consists of an 8-bitshift register and a storage register with three-state parallel outputs (2 pcs)

CODE

400-232

CODE

CODE



CODE 400-205

CODE

400-225

CODE

400-231

4 Digit Seven Segment Display

4 DIGIT 7 SEGMENT

DISPLAY

STEPPER MOTOR

A stepper motor driver board to

drive the stepper motor.

DRIVER



IR RECEIVER

400-206

An IR receiver is a component which receives infrared signals



PASSIVE BUZZER

400-226 A passive buzzer that needs square signals of 2k-5k to drive



A photoresistor module of which the

resistance decreases with increasing





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| RFID MODULE | CODE 400-207 | RESISTOR 220 OHM | CODE 400-208 | 8 x 8 DOT MATRIX | CODE 400-209 | RESISTOR | CODE 400-210 | |
|--|--|---|---|--|--|---|--|--|
| Power Voltage : 3.3V, Operating frequency: 13.56MHz. | | 8pcs of Resistor 220 ohm | | 8 x 8 Dot Matrix | | 2pcs of Resistor 1K Ohm and 2 pcs of Resistor 10K ohm | | |
| 4x 4 KEYPAD | CODE 400-211 | REMOTE CONTROL | CODE 400-212 | JOYSTIC PS2 | CODE 400-213 | HUMITURE SENSOR | CODE 400-214 | |
| 4x4 matrix keypad mod with up to 16 keys. | 4x4 matrix keypad module with up to 16 keys. | | infrared remote control as infrared transmission. | | 2 lines of analog output (X, Y) and 1 of digital output (Z). | | To test temperature and humidity, which uses the sensor DHT11. | |
| | | REMOTE CONTROL | | JOYSTICK PS2 | | HUMITURE SENSOR VM 48V COM | | |
| RGB LED | CODE 400-215 | VIBRATION SWITCH | CODE 400-216 | PUSH BUTTON SWITCH | CODE 400-217 | TILT SWITCH | CODE 400-218 | |
| Full color common anode RGB LED | | Induces shock force and transfers the result to a circuit device thus triggering VIBRATION SWITCH | | 4 pcs Push Button Switch | | A tilt switch is to detect an inclination | | |
| RELAY | CODE 400-219 | WATER MEASUREMENT | CODE 400-220 | SOUND SENSOR | CODE 400-221 | FLAME SENSOR | CODE 400-222 | |
| Working voltage: 5v, With power indicator | | Water level sensor is a module that can sense the depth of water | | The sensor receives sound waves & converts them into electrical signal | | Consists of a flame sensor, resistor, capacitor, potentiometer, and comparator LM393 in an IC | | |



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| REAL TIME CLOCK | CODE 400-227 | POTENTIOMETER 50K | CODE 400-228 | SERVO MOTOR | CODE 400-229 | ARDUINO MAIN CONTROL BOARD (OPTIONAL ITEM) | CODE 400-201 |
|--|-----------------|----------------------|-----------------|---|-----------------|--|-----------------|
| Operating voltage: 4.5V to 5.5, RTC Chip DS1307 | | Potentiometer 50 K | | Servo consists of shell, circuit board, non-core motor, gear and location detection | | Arduino Uno R3 Microcontroller Board Digital I/O: 14(6 PWM output) Power Supply: 3.3vdc and 5vdc Analog input: 6 | |
| REAL-TIME CLOCK | | POTENTIOMETER | | SERVO MOTOR | | Meri Calculari, Sacration Service Serv | |

RASPBERRY PI 4 MAIN CONTROL BOARD (OPTIONAL ITEM)

400-321

CODE

- CPU Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- 28x user GPIO supporting various interface
- Power Supply: 5vdc 3A



EXPERIMENT TOPICS:

- Controlling LED by Button
- Controlling LED by PWM
- Interactive LED Flowing Lights
- I2C LCD1602
- Buzzer
- Tilt-Switch
- Answer Machine
- Serial Monitor
- Photoresistor
- Controlling Voice by Light
- Voice Sensor
- LM35 Temperature Sensor
- Water Level Sensor
- Segment Display

- Stopwatch 4-Digit 7-Segment Display
- Dot-matrix Display
- RGB LED
- Driving 7-Segment Display by 74HC595
- Button Switch
- Clock Module
- Humiture Sensor
- Relay Module
- Stepper Motor
- Servo
- Joystick PS2
- Infrared-Receiver
- RFID Entrance Guard System
- Password Lock

Manuals:

- (1) All manuals are written in English.
- (2) Model Answer
- (3) Teaching Manuals

General Terms:

- (1) Accessories will be provided where applicable.
- (2) Manuals & Training will be provided where applicable.
- (3) Designs & Specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product

Warranty:

2 Years

ORDERING INFORMATION:

| ITEM | MODEL NUMBI | CODE |
|---|----------------|---------|
| RFID TRAINING SYSTEM (GOTT IOT CLOUD READY) WITH ARDUINO | GOTT-RFIDTS-01 | 400-200 |
| RFID TRAINING SYSTEM (GOTT IOT CLOUD READY) WITH RASPBERRY PI | GOTT-RFIDTS-02 | 400-600 |