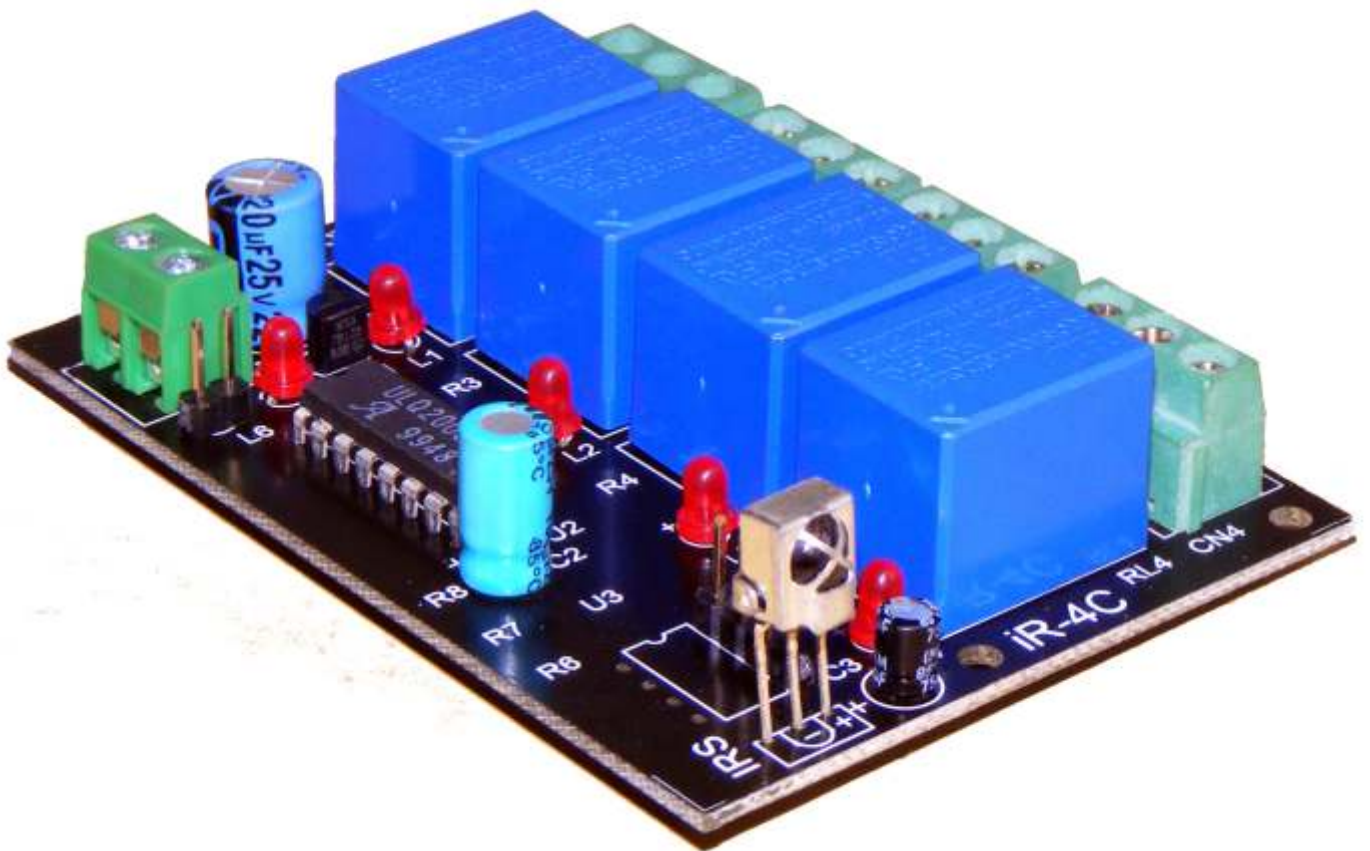
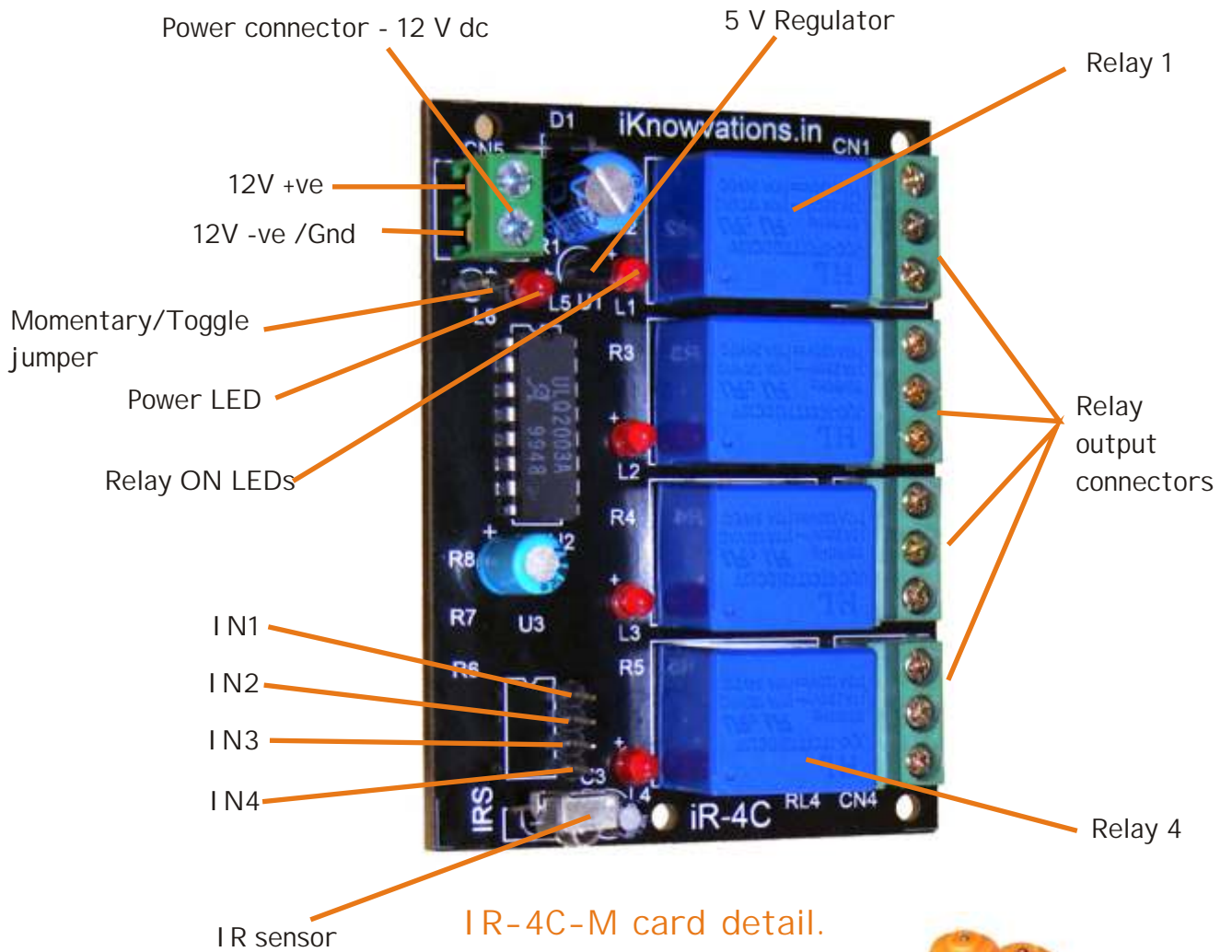




# User Manual



# I R-4C-M detail



I R-4C-M card detail.



I R remote controlled Robot **iKnowBot1** using iR-4C-M card.

Get construction details & videos.

## Remote handset detail

This is default option.



Other options are available when you want to operate two or more 4 channel boards in same room and you want to operate them with same remote at a time. **You have to specify at the time of placing order if you want to have more than one option.**

Please note that Remote handset design may change from time to time but functions will remain same.

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4 Channel I R Remote Control Relay Board - iR-4C-M

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Connection with I R-4C-M with 2 DC motors/actuators

Fig -1.

We here assume that when A & C terminals are +ve and B & D terminals are -Ve the respective motors/actuators will move Forward or Clock wise. The Voltage applied will be as per motor/actuator's specifications.

Fig -2.

Robot direction	Left Motor	Right Motor
Forward	Forward	Forward
Reverse	Reverse	Reverse
Right Forward	Forward	Off
Left Forward	Off	Forward
Right Reverse	Reverse	Off
Left Reverse	Off	Reverse

Table-1

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## 4 Channel I R Remote Control Relay Board - iR-4C-M

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Following table shows Relay Status of respective Robot direction movement.

Robot direction	Relay 1	Relay 2	Relay 3	Relay 4
Forward	OFF	OFF	OFF	ON
Reverse	ON	ON	ON	OFF
Right Forward	OFF	ON	OFF	ON
Left Forward	ON	OFF	OFF	ON
Right Reverse	ON	OFF	ON	OFF
Left Reverse	OFF	ON	ON	OFF

Table-2

### Input Pins :-

There are 4 input pins on the card. I N1 to I N4. These inputs can be used to connect leaf switches on Robot board. Closing of these switches will prevent further movement in that direction but it will be possible to move to other directions. These inputs can also be used as limit switches for Forward or Reverse movement in case of actuators.

Following table shows effect of each switch closer. Switch closer makes the respective input pin 0 or low. You can use any Push to ON switches.

Input Pin	Effect
Switch closure on I N1	Stops Forward & Forward Left movement
Switch closure on I N2	Stops Forward & Forward Right movement
Switch closure on I N3	Stops Reverse & Reverse Left movement
Switch closure on I N4	Stops Reverse & Reverse Right movement

Table-3.

### Toggle or Momentary action.

This action is selected by closing or keeping open the respective Jumper Pins. Please refer to the figure on page 2. Toggle action ( pressing button once will start that operation and pressing again the same button will stop that operation) can be selected by keeping jumper open. While connecting the jumper pins will make it for Momentary. Momentary means the action will be performed till any particular button is kept pressed.



# 4 Channel I R Remote Control Relay Board - iR-4C-M

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## Specifications -

- Transmitter - I R Transmitter handset is common for all the receiver kits.  
Based on RC5 Philips coding.  
Requires 2 AAA battery.
- Receiver - Outputs - 4 relays for iR-4C  
Input supply - 12 V DC  
Relay contact rating - 5 amp at 230 V AC.

## Features -

- Based on latest microcontroller.
- Four relay outputs for different kind of requirement.
- Potentially free NO & NC contact outputs.
- Momentary & Toggle mode selectable by jumper.
- Long range
- Easy to add remote control facility to many projects
- Visual LED indication for each Relay.
- Visual LED indication for power.
- Small & Compact size.

## Can be used for -

- Switching one or two DC motors by I R remote.
- Operation of DC actuators.
- Converting machines & equipments to be operated by I R remote.
- Making Infrared remote controlled Robots.

Want something different ? More outputs ? Special requirements ?  
Different configuration ? Just let us know at [support@iknowvations.in](mailto:support@iknowvations.in).  
We will provide you solutions as per your requirements. After all our more than 20 years experience helps .



## 4 Channel I R Remote Control Relay Board - iR-4C-M

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If you have any questions, want any assistance, want us to develop any special products for you just contact us at [support@iknowvations.in](mailto:support@iknowvations.in).

We have other products also that might interest you like -



6 channel I R Remote control Board - AZ6CR-03

12 channel I R Remote control Board - iR-12C



U452 is an USB based Relay Card having 4 relays, up to 16 I/O channels & 8 ADC channels. The ADC resolution is 8/10/12 bits user selectable.

R242 is an RS232 based Relay Card having 4 relays, up to 9 I/O channels & 4 ADC channels. The ADC resolution is 10 bits.



Ethernet based DAQ & I/O card.

6 digit 7 segment Multipurpose LED Counter



For more information visit - [www.iknowvations.in](http://www.iknowvations.in)



# 4 Channel I R Remote Control Relay Board - iR-4C-M

## User manual

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