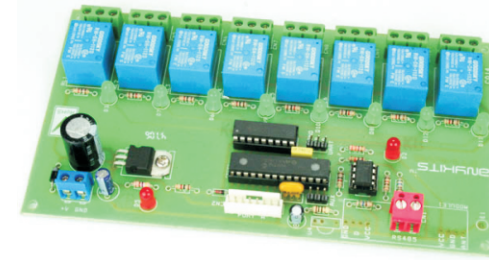


RS485 CONTROLLED 8 RELAY BOARD

With RS485 Controlled 8 Relay Board you can control upto 8 SPDT (Single Pole Double Throw) relays using a simple RS485 protocol.

- Upto 8, 12V SPDT relay control
- Industry standard relay drive IC - ULN2803
- Data received indicator LED
- LED indicator to display relay state
- Power-On LED indicator
- Onboard regulator IC
- Screw terminal type connector for easy connection of all wires to the PCB
- Simple RS485 Protocol
- Can be controlled either by a microcontroller board or via PC using suitable RS232 - RS485 converter
- Diode protection against reverse polarity connection
- NC-C-NO pin outs from each relay into a screw terminal connector
- Four mounting holes of 3.2 mm each
- PCB dimensions 166 mm x 92 mm



This project helps you control 8 relays using RS485 link with the help of a PC. The project can effectively convert a standard PC to a powerful PLC (Programmable Logic Controller). At the PC end, you will need to use our RS232 to RS485 Interface C020 or any other suitable RS232 to RS485 Converter.

This kit can offer a low-cost serial relay contact interface, easy to use with Visual Basic, Basic, C, Labview, Testpoint or other high level languages that allow access to a serial port.

You can simply issue control commands using any popular Terminal Port software available on the net. The Serial port on the computer should be configured to Bits per second - 2400 (Baud), Data bits - 8, Parity - None, Stop bits - 1, Flow control - None.

Relay Output Command Summary :

RBnc

"RB" preamble,

n - Relay Number (1 to 8)

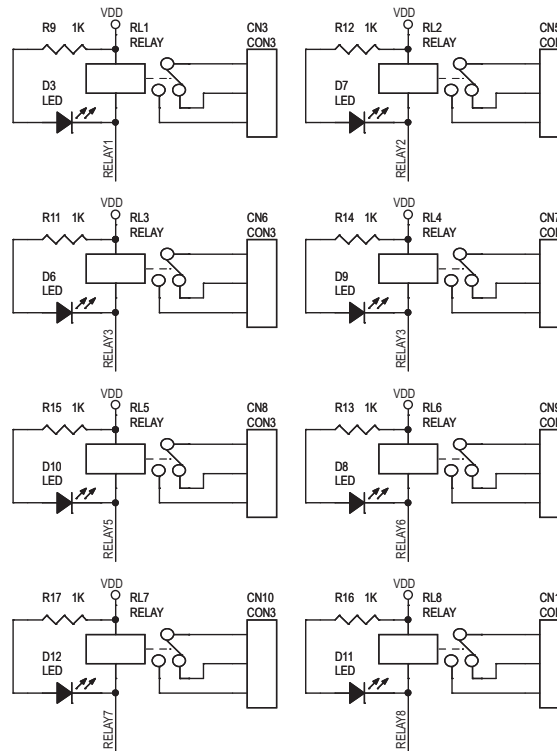
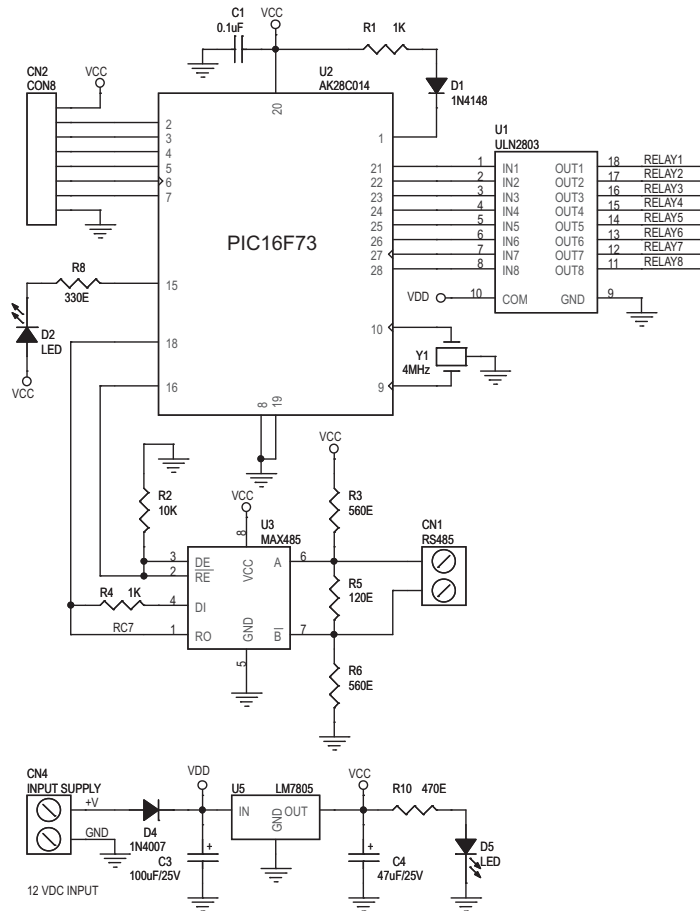
c - Set/Reset (1 for set, 0 for reset)

For example - RB51 (Relay No. 5 is Set)

RS485 cable connects at CN1 connector. The setting or resetting of the relays is indicated by the associated LED's close to them. LED D2 blinks to indicate a valid command received. LED D5 is the Power On Board Indicator.



RS485 CONTROLLED 8 RELAY BOARD



S.R.	QTY.	REF.	DESCRIPTION
1	2	CN1, CN4	2 PIN SCREW TERMINAL CONNECTOR
2	8	CN3, CN5, CN6, CN7, CN8, CN9, CN10, CN11	3 PIN SCREW TERMINAL CONNECTOR
3	1	C1	0.1µF
4	1	C3	100µF/25V
5	1	C4	47µF/25V
6	1	D1	1N4148
7	10	D2, D3, D5, D6, D7, D8, D9, D10, D11, D12	RED LED
8	1	D4	1N4007
9	8	RL1, RL2, RL3, RL4, RL5, RL6, RL7, RL8	12V RELAY
10	10	R1, R4, R9, R11, R12, R13, R14, R15, R16, R17	1K
11	1	R2	10K
12	2	R3, R6	560E
13	1	R5	120E
14	1	R8	330E
15	1	R10	470E
16	1	U1	ULN2803
17	1	U2	AK28C014 PIC16F73
18	1	U3	MAX485
19	1	U5	7805
20	1	Y1	4MHz RESONATOR
21	1	SOCKET	18 PIN DIP IC SOCKET
22	1	SOCKET	28-N PIN DIP IC SOCKET
23	1	SOCKET	8 PIN DIP IC SOCKET
24	1	SCREW	SC02905
25	1	NUT	NT02900



