

[R990io.doc 7/11/2002]

# **Relay Board.**

# Features:

- Can be plugged directly into R990mb Mother-Board or it can be used in stand-alone operation.

- 4 high capacity relays.
- size 87 x 87 x 25 mm (3.5 x 3.5 x 1.0 inch)
- low cost



### **Description:**

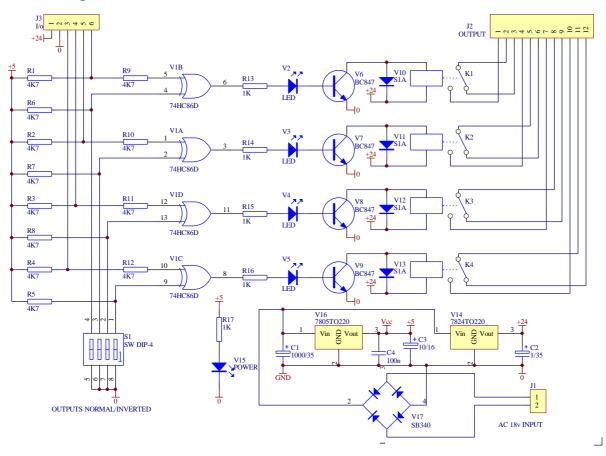
R990io is an output board with 4 high current relays (AC 10 A / 250 V). These relays can be set as normal or inverted with DIPswitches.

There is in-build DC24V power supply. This supply can be used as Control Supply for drivers.

There are 3 connectors on the R990io:

- J1 2-pin plug-in connector AC 15 to 24 volts input. Power from transformer 20VA+.
- J2 12-pin plug-in connector Relays outputs.
- J3 6-pin plug-in connector Plugs directly into R990mb motherboard.

# **Circuit diagram:**





# Pin-out:

#### J2 – 12-pin plug-in connector: Relays outputs

Pin#	Signal name
1	Relay 4 – Normally closed
•	
2	Relay 4 – Common
3	Relay 4 – Normally open
4	Relay 3 – Normally closed
5	Relay 3 – Common
6	Relay 3 – Normally open
7	Relay 2 – Normally closed
8	Relay 2 – Common
9	Relay 2 – Normally open
10	Relay 1 – Normally closed
11	Relay 1 – Common
12	Relay 1 – Normally open

# J3 – 6-pin plug-in connector: Plugs directly into R990mb mother board.

Pin#	Signal name
1	DC+24V output
2	0V (signal ground)
3	Relay 1 (Coolant pump)
4	Relay 2 (CCW spindle)
5	Relay 3 (CW spindle)
6	Relay 4 (Drive enable)