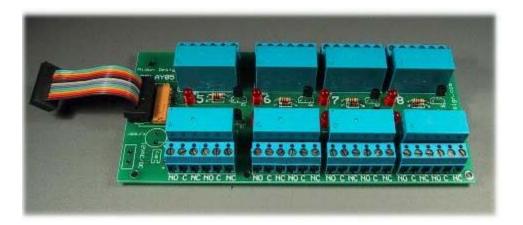
### A Parallel Relay Interface RELAY05



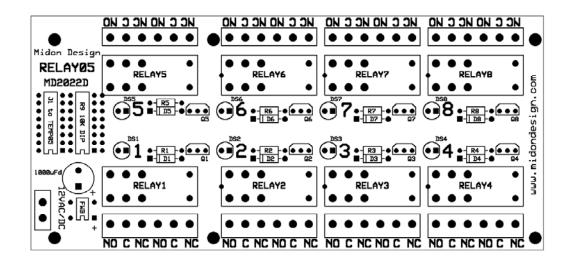
**Table of Contents** 

| INTRODUCTION           | 2 |
|------------------------|---|
| CONNECTIONS TO RELAY05 | 2 |
| RELAY05 STOCKLIST      | 4 |
| LEGAL DISCLAIMER       | 5 |

#### Introduction

Thank you for your purchase of the RELAY05. The following instructions provide information on how to connect your RELAY05.

To complete this project, you will need to connect it to a source of logic control input and power. We assume that you have purchased this kit in conjunction with the TEMP05 and the following instructions apply to use of the RELAY05 with that kit.



**Figure 1 Parts Placement** 

### **Connections to RELAY05**

The control logic is connected to RELAY05 via a 16-pin DIP jumper J1. The pinout for J1 is shown in Table 1. If you are using RELAY05 with TEMP05, connect a 16 pin DIP to DIP jumper cable from J1 on RELAY05 to J3 on the other unit. Keep the jumper as short as possible.

If you choose to connect RELAY05 to another product, please follow the jumper pin-out details in Table 1.

The relay outputs are connected as shown in Figure 1. NC (Normally Closed), NO (Normally Open) and C (Common) contacts are available from each pole of each relay, providing you with 16 different switching points.

The relay contacts are rated for 5A at 250VAC or 5A at 28VDC. Do not exceed these ratings!

#### Table 1. J1 Pinout

| Pin | Description                                    |  |  |  |
|-----|------------------------------------------------|--|--|--|
| 1   | Relay 1 control pin (0V = off, 5 to 12 V = on) |  |  |  |
| 2   | Relay 2 control pin                            |  |  |  |
| 3   | Relay 3 control pin                            |  |  |  |
| 4   | Relay 4 control pin                            |  |  |  |
| 5   | Relay 5 control pin                            |  |  |  |
| 6   | Relay 6 control pin                            |  |  |  |
| 7   | Relay 7 control pin                            |  |  |  |
| 8   | Relay 8 control pin                            |  |  |  |
| 9   | Ground                                         |  |  |  |
| 10  | Ground                                         |  |  |  |
| 11  | Ground                                         |  |  |  |
| 12  | Ground                                         |  |  |  |
| 13  | +12 Volts DC                                   |  |  |  |
| 14  | +12 Volts DC                                   |  |  |  |
| 15  | +12 Volts DC                                   |  |  |  |
| 16  | +12 Volts DC                                   |  |  |  |

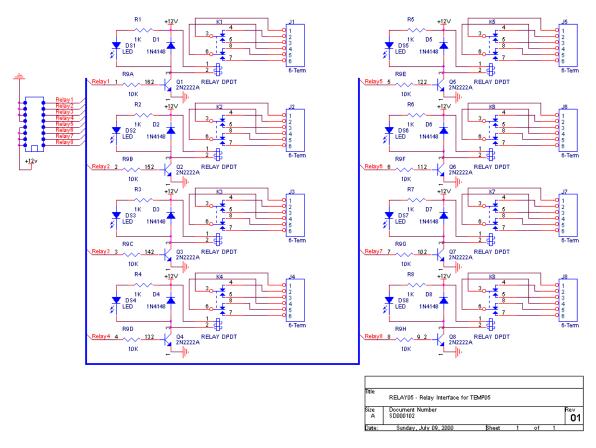


Figure 2 Schematic Diagram

#### **RELAY05 Stocklist**

| Qty | Designation | Part No | Description                         |
|-----|-------------|---------|-------------------------------------|
| 1   | PCB         | MD2022  | RELAY05 PCB                         |
| 8   | R1-R8       | 1K      | Resistor 1/4W 5% 1K                 |
| 8   | D1-D8       | 1N4148  | Signal diode                        |
| 8   | Q1-Q8       | PN2222  | Transistor NPN TO-92                |
| 8   | DS1-DS8     | LED     | LED Red                             |
| 16  | J1-J16      | 3TERM   | Terminal Block, 5.08MM, 3 position, |
| 1   | U1          | DIP16   | DIP Socket, 16 pin                  |
| 8   | K1-K8       | DPDT12  | Relay DPDT 12V (Radio Shack         |
|     |             |         | 900-2335)                           |
| 1   | R9          | 10KDIP8 | DIP Resistor, 10K 8 Pack            |

Your comments are appreciated. If you would like to submit feature requests or product recommendations, please e-mail us.

#### Legal Disclaimer

YOUR USE OF THIS PRODUCT IS AT YOUR OWN RISK. YOU ASSUME FULL RESPONSIBILITY AND RISK OF LOSS RESULTING FROM THE USE OF THIS PRODUCT. MIDON DESIGN WILL NOT BE LIABLE FOR ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR ANY OTHER DAMAGES WHATSOEVER, WHETHER IN AN ACTION BASED UPON A STATUTE, CONTRACT, TORT (INCLUDING, WITHOUT LIMITATION NEGLIGENCE) OR OTHERWISE, RELATING TO THE USE OF THIS PRODUCT.

### Thank you!

#### mitch@midondesign.com

© Copyright 2002 Midon Design. All rights reserved. No part of this document may be reproduced, recorded, transmitted or distributed in any form or by any means without the written consent of Midon Design.