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16 CHANNELS RELAY OUTPUT BOARD

OPERATION MANUAL

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DECISION
Computer International Co., Ltd.

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CHAPTER 1

INTRODUCTION

The 16 channel relay output board provides 16 Single Pole Double Throw (SPDT) relays to drive 16 digital output lines. Each relay channel can be used to control ON / OFF of external devices, to drive external high power relays, to activate alarms etc. There are 16 LED indicators correspond to 16 relays, when relay is energized, the corresponding LED is light. The power source is user selectable, +12V power source from internal PC bus or up to +24V external power supplier.

The features of the 16 channels relay output board are:

- Support 16 relay output channels.
- LED indicates when relay is energized.
- Provides 12VDC from internal PC bus or up to 24VDC external power supplier.
- Built in screw terminals for easy wiring.
- The Normal Open (NO), Normal Close (NC), and Common contacts (COM) of each relay are brought out to the screw connector.
- Max contract rating: 250VAC 10 Amp, 30VDC 10Amp.
- Operate (set) time: 15ms max.
- Release (reset) time: AC 10ms max, DC 5ms max.
- Max Operating voltage 380VAC or 125VDC, and max operating current 10A.
- Max switching capacity 2500VA 300W.
- DC coil 24VDC for 1100 ohm resistance or 12VDC for 275 ohm resistance.

CHAPTER 2

UNPACKING INFORMATION

Check that your 16 channels relay output package includes the following items:

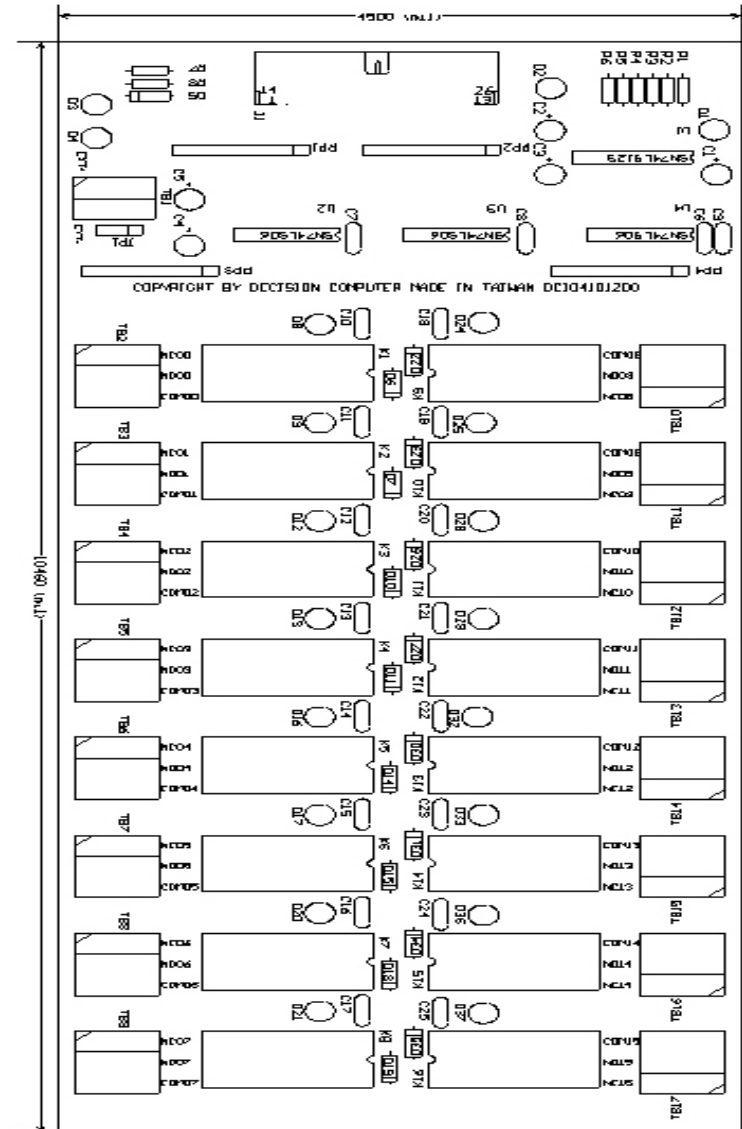
- 16 channels relay output board.
24VDC coil type or 12VDC coil type.
- One 26 pins flat cable.
- User manual.
- Warranty form.

CHAPTER 3

HARDWARE CONFIGURATION

Before you use the 16 channels relay output board, you must ensure that the power supplier and connectors are set correctly. Observe the figure in the follows, the proper settings for the 16 channels relay output board is described in the following.

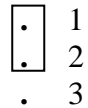
DECISION Computer International Ltd.,





1. Internal or External Power Selection

JP1

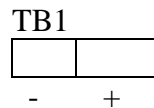


JP1 is used to select internal or external power supply, when JP1-1 and JP1-2 is short; the power is supplied by PC bus, where 12VDC is supplied. When JP1-2 and JP1-3 is short, external power supplier supplies the power. Up to 24VDC for external power. For 12VDC coil relay, maximum 12VDC power source is accepted, for 24VDC coil relay, only external power supplier can drive the relay.

Jumper	Power Source
Pin 1 and pin 2	Internal PC bus
Pin 2 and pin 3	External power source

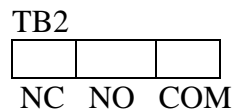
2. External Power Supplier

TB1 is used to connect 12V or 24V external power, the configuration is shown in the follows.



3. Pin Assignments of Each Relay

TB2 to TB17 are connectors for each relay. The pin assignment of each relay is shown in the following.



4. Signal Assignments

Pin	Description
1	+12V
2	+12V
3	Line00
4	Line02
5	Line04
6	Line06
7	Line08
8	Line10
9	Line12
10	Line14
11	CE
12	+5V
13	-12V
14	GND
15	GND
16	Line01
17	Line03
18	Line05
19	Line07
20	Line09
21	Line11
22	Line13
23	Line15
24	CE
25	GND
26	GND



APPENDIX A**WARRANTY INFORMATION*****A.1 Copyright***

Copyright 2000, 2001 DECISION COMPUTER INTERNATIONAL CO., LTD. All rights reserved. No part of 16 CHANNELS RELAY OUTPUT BOARD software and manual may be reproduced, transmitted, transcribed, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior written permission of DECISION COMPUTER INTERNATIONAL CO., LTD.

Each piece of 16 CHANNELS RELAY OUTPUT BOARD package permits user to use 16 CHANNELS RELAY OUTPUT BOARD only on a single computer, a registered user may use the program on a different computer, but may not use the program on more than one computer at the same time.

Corporate licensing agreements allow duplication and distribution of specific number of copies within the licensed institution. Duplication of multiple copies is not allowed except through execution of a licensing agreement. Welcome call for details.

A.2 Warranty Information

DECISION warrants that for a period of one year from the date of purchase (unless otherwise specified in the warranty card) that the goods supplied will perform according to the specifications defined in the user manual. Furthermore that the 16 CHANNELS RELAY OUTPUT BOARD product will be supplied free from defects in

materials and workmanship and be fully functional under normal usage.

In the event of the failure of an 16 CHANNELS RELAY OUTPUT BOARD product within the specified warranty period, DECISION will, at its option, replace or repair the item at no additional charge. This limited warranty does not cover damage resulting from incorrect use, electrical interference, accident, or modification of the product.

All goods returned for warranty repair must have the serial number intact. Goods without serial numbers attached will not be covered by the warranty.

Transportation costs for goods returned must be paid by the purchaser. Repaired goods will be dispatched at the expense of 16 CHANNELS RELAY OUTPUT BOARD.

To ensure that your 16 CHANNELS RELAY OUTPUT BOARD product is covered by the warranty provisions, it is necessary that you return the Warranty card.

Under this Limited Warranty, DECISION's obligations will be limited to repair or replacement only, of goods found to be defective as specified above during the warranty period. DECISION is not liable to the purchaser for any damages or losses of any kind, through the use of, or inability to use, the 16 CHANNELS RELAY OUTPUT BOARD product.

DECISION reserves the right to determine what constitutes warranty repair or replacement.

Return Authorization: It is necessary that any returned goods are clearly marked with an RA number that has been issued by DECISION. Goods returned without this authorization will not be attended to.

APPENDIX B**DATA SHEET**