

## 2.6 Spectra Logic Disk Controller Board

### 2.6.1 Introduction

The Spectra Logic Disk Controller board controls data transfer between the CDC LARK Disk Drive system and the 990/10A Central Processor.

### 2.6.2 Description and Operation

Refer to Spectra 16/26/36 Product Reference Manual for description and operation.

### 2.6.3 Indications, Switches and Links

#### (1) Indications

Three LEDs are mounted on the edge of the board.

A board self test is run each time the controller powers up. There are three LEDs on the SPECTRA 16 that show the status of the controller. The red LED indicates that the self test has failed on power up. The two green LEDs indicate that both the disk and tape portions of the controller are idle.

The indications are listed below:

<u>GREEN LED (MT)</u>	<u>GREEN LED (DK)</u>	<u>RED LED (DG BAD)</u>	<u>MEANING</u>
ON	ON	OFF	Self test successful.
OFF	ON	OFF	Disk portion of self test successful.
OFF	OFF	OFF	LED failure.
OFF	OFF	ON	Self test failure.
OFF	ON	ON	Self test failure.
ON	ON	ON	LED failure.
ON	OFF	ON	LED failure.
ON	OFF	OFF	LED failure.

Refer to Fig. 1 for LED locations.

(2) Switches

Three 8-way DIL switches and one 4-way DIL switch are mounted on the card. The function of the switches is listed below:

TILINE Address Switch

SW1-4        Establishes disk address  
SW5-SW8      Establishes tape address

CPU Option Switch

SW1-SW3      Sets burst rate, the number of words transferred during a data transfer.  
  
SW4           Enables/disables data chaining Option 1.  
  
SW5           ON sets physical head format.  
  
SW6-SW8      Sets Sector Interleave option.

Disk Drive Configuration Switch

SW1-SW4      Configures the board for operating with 25MB LARK II fixed or removable disk.  
  
SW5-SW8      Not Used.

Disk Option Switch

SW1           System Write Protect  
  
              CLOSE Inhibits write operations  
              OPEN  Allows write operations  
  
SW2           ECC Correction  
  
              CLOSE Inhibits ECC corrections  
              OPEN  Allows ECC corrections  
  
SW3           Format Command  
  
              CLOSE Inhibits format commands  
              OPEN  Allows Format commands

SW4            Alternate Track Feature

CLOSE Enables alternate track feature  
OPEN Disables alternate track feature

Refer to Fig. 1 for location and setting of switches.

NOTE: The normal setting of the switches is shown.

(3) Links

Refer to Fig. 1 for location and fitting of links.

2.6.4 Input/Output Connections

Seven input/output connectors are located on the board.  
Refer to Fig. 1 for connector location.

P1    80-Way Edge Connector

P2    80-Way Edge Connector

J1    60-Way Ribbon Connector

Command cable interconnection with CDC LARK Disk  
Controller.

J2    26-Way Ribbon Connector

Data cable interconnection with first CDC LARK Disk  
Controller.

J3    26-Way Ribbon Connector

Data cable interconnection with second CDC LARK Disk  
Controller.

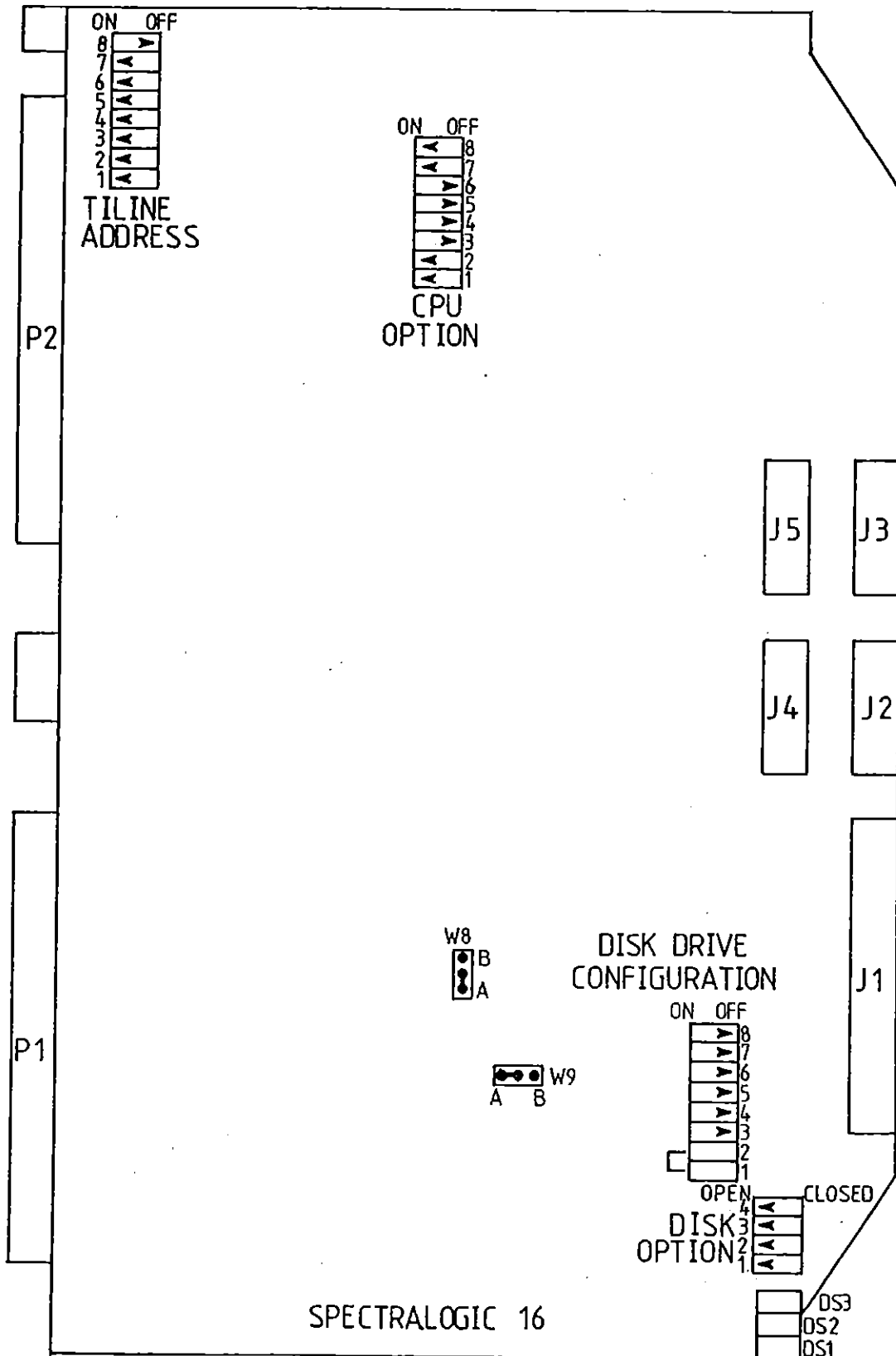
J4    26-Way Ribbon Connector

Data cable interconnection with third CDC LARK Disk  
Controller.

J5    26-Way Ribbon Connector

Data cable interconnection with fourth CDC LARK Disk  
Controller.

# SWITCHES, CONNECTORS, LEDS AND LINKS SETTINGS AND LOCATIONS



NOTE.  
DISK DRIVE CONFIGURATION SWITCH  
SELECTS THE DISK THE SYSTEM IS LOADED  
AND RUN FROM

- SWITCH
- 1 ON ] FIXED DISK
  - 2 OFF ] FIXED DISK
  - 1 OFF ] REMOVABLE DISK

FIG. 1