BRIAN
INSTRUMENTS

UNIDAPT 450L

OPERATION AND USE

15 FEBRUARY 1990

626 S. State College Boulevard, Fullerton, California 92631
(714) 992-5540 • Telex 62823479 • Fax (714) 992-5553

INTRODUCTION

The **UNIDAPT 450L** is an externally mounted P.C.B. Assembly that is used in conjunction with the **BRIKON 723** or **QUICKLIGN 123** Series of FDD testers to extend the range of testing to includew the following classes of Flexible Disk Drives:

* 5 1/4", 300/360 R.P.M., 250/300/500 KBS transfer rate.
* 3 1/2", 300/600 R.P.M., 250/500 KBS transfer rate, 34 Pin I/O.
* 3 1/2", 300/600 R.P.M., 250/500 KBS transfer rate, 34 Pin I/O (power on I/O).
* 3 1/2", 300 R.P.M., 500 KBS transfer rate, 40 Pin I/O (integrated I/O and power).
* 3 1/2", 300 R.P.M., 250/500 KBS transfer rate, 26 Pin I/O (integrated I/O and power).
* All the above configurations with CMOS/TTL Interface

The **UNIDAPT 450L** is attached to the tester through the 50 Pin I/O and 4 Pin Power provided by the tester. The 34 Pin drive I/O cable from the **UNIDAPT 450** is providied through a ribbon cable that has both pin style and card edge connectors. The 40 Pin I/O is card edge style only. The 26 Pin I/O is pin style and requires no cable (provided by drive). Drive Power is provided through a 4 Pin, 5 1/4" style connector with 3 1/2" adaptor included to support conventional drives.

SWITCHES

The **UNIDAPT 450L** has three switches to extend the range of operation (see Figure 1) and are xexplained below:

S1 **POWER ON/OFF** - This switch is used to direct +5VDC and +12VDC (if required) to the I/O of the 26, 34 and 40 Pin interfaces. When **ON**, power is through the I/O on the pins as noted in Figure 1. When **OFF**, power is conventional through **J6** and not supplied to the I/O. The pins affected are as follows:

34 PIN INTERFACE		**40 PIN INTERFACE**		**26 PIN INTERFACE**	
VOLTAGE	PINS	VOLTAGE	PINS	VOLTAGE	PINS
+5VDC	5,7,9,11	+5VDC	38	+5VDC	1,3,5,7
+12VDC	29,31,33	+12VDC	40		

S2 **PIN 2/9 CONTROL** - This switch is used to switch the state of Pin 2 of the 34 and 40 Pin interfaces or Pin 9 of the 26 Pin interface. When in the **OPEN** position, these Pins will be held HIGH via the drive interface pullup resistor. When in the **GND** position, these Pins will be held to Ground.Drives make use of this pin to control whether high or low density (250/500 KBS), and in some cases to control spindle speed.

S3 **PIN 3/11 CONTROL** - This switch is used to change the state of Pin 3 of the 34 Pin interface and Pin 11 of the 26 Pin interface. In conjunction with **S2**, this switch is used to control the spindle motor speed on tri-speed drives (180,300,360 RPM) that have a 34 Pin interface (refer to Figure 1 for speed control settings). Some 26 Pin interfaces use this Pin for density control (see the attached page for switch settings. When in the **OPEN** position, these Pins will be held HIGH via the drive interface pullup resistor. When in the **GND** position, these Pins will be held to Ground.

SWITCH SETTINGS - 26 PIN INTERFACE

LAPTOP MODEL	FDD MODEL	FORMATTED CAPACITY	SWITCH SETTINGS S1	S2	S3
T1600	CITIZEN	720	ON	GND	OPEN
	ZA0778P02	1.44	ON	OPEN	OPEN
T1000	TOSHIBA FDD4271A0W	720	ON	OPEN	OPEN
T3200	TOSHIBA FDD4666G52	1.44	ON	OPEN	OPEN
T5100	TOSHIBA FDD4272G9Y	720	ON	OPEN	OPEN
T1200	TOSHIBA FDD4266A8W	720	ON	OPEN	OPEN
T1100	TOSHIBA BR602930-4	720	ON	OPEN	OPEN

UNIDAPT 450L LATOUT

NOMENCLATURES

J1	=	50 PIN I/O FROM TESTER
J2	=	34 PIN I/O TO DRIVE
J3	=	40 PIN I/O TO DRIVE
J4	=	26 PIN I/O TO DRIVE
J5	=	4 PIN POWER FROM TESTER
J6	=	4 PIN POWER TO DRIVE
S1	=	POWER CONTROL TO DRIVE
S2	=	PIN 2/9 CONTROL
S3	=	PIN 3/11 CONTROL

SIGNALS 34 PIN I/O

PIN	SIGNAL NAME
2	NOT USED
4	IN USE
6	DRIVE SELECT 4
8	INDEX
10	DRIVE SELECT 1
12	DRIVE SELECT 2
14	DRIVE SELECT 3
16	MOTOR ON
18	DIRECTION IN
20	STEP
22	WRITE DATA
24	WRITE GATE
26	TRACK 00
28	WRITE PROTECT
30	READ DATA
32	SIDE 1 SELECT
34	READY
5,7,9,11	GND/+5VDC (SEE S1)
29,31,33	GND/+12VDC (SEE S1)

ALL OTHER ODD PINS ARE GROUND

SIGNALS 26 PIN I/O

PIN	SIGNAL NAME
1,3,5,7	+5VDC
2	INDEX
4	DRIVE SELECT 1
6	DISK CHANGE
8	READY
9	+5VDC/GND (SEE S2)
10	MOTOR ON
11	+5VDC/GND (SEE S3)
12	DIRECTION IN
14	STEP
16	WRITE DATA
18	WRITE GATE
20	TRACK 00
22	WRITE PROTECT
24	READ DATA
26	SIDE 1 SELECT
13,15,17,19, 21,23,25	GROUND

SIGNALS 40 PIN I/O

PIN	SIGNAL NAME
2	DENSITY SELECT
4	READY
6	SELECT 3
8	INDEX
10	SELECT 0
12	SELECT 1
14	SELECT 2
16	MOTOR ON
18	DIRECTION IN
20	STEP
22	WRITE DATA
24	WRITE GATE
26	TRACK 00
28	WRITE PROTECT
30	READ DATA
32	SIDE 1 SELECT
34	DISK CHANGE
36	FRAME GROUND
38	+5 VDC
40	+12 VDC

ALL ODD PINS ARE GROUND

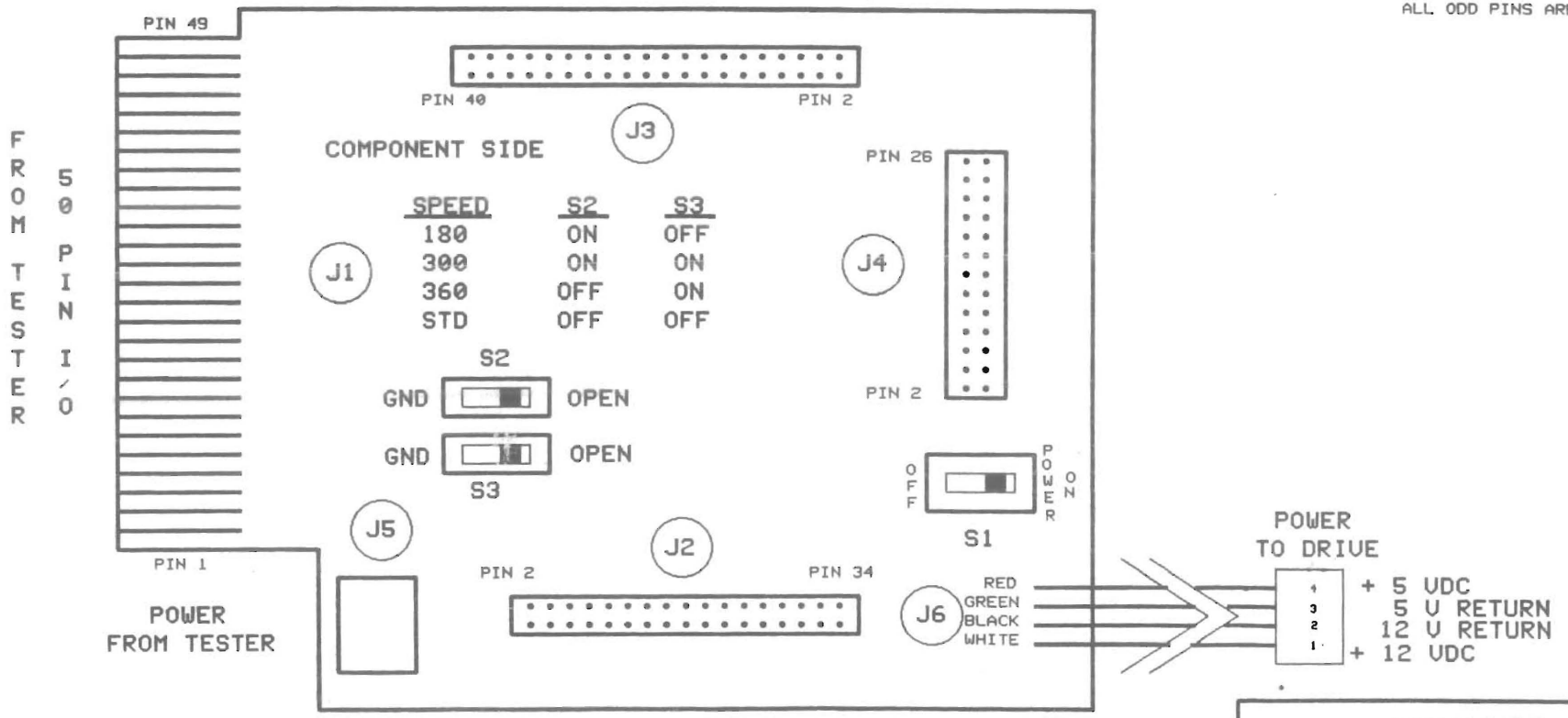

FIGURE 1

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UNIDAPT 450L LAYOUT

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