KW-530 SERIES

FLOPPY DISK CONTROLLER

USER'S MANUAL

PREFACE

COYRIGHT

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1— INTRODUCTION

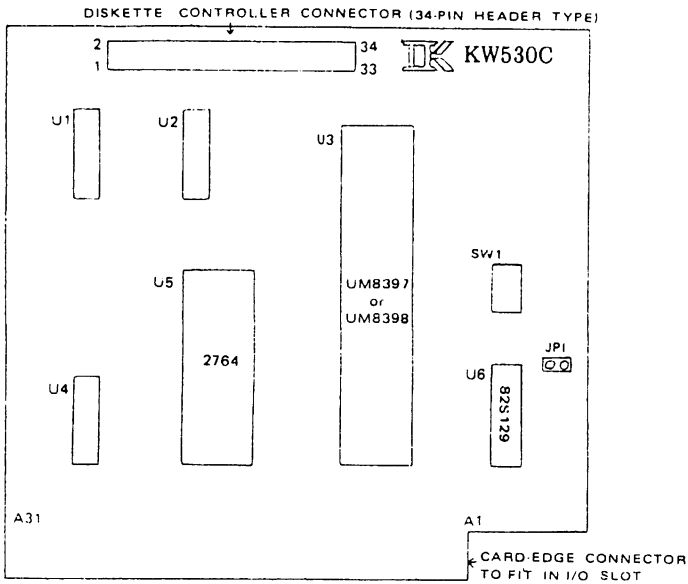
The KW-530 series is a complete line of diskette drive controllers designed to give you maximum flexibility in configuring:

A) 8086
B) 8088
C) 80286
D) 80386

personal computer systems. You will enjoy the superior performance of the KW-530 series controllers, particularly their ability to format at high speeds, as well as transfer data to and from drives of different capacities.

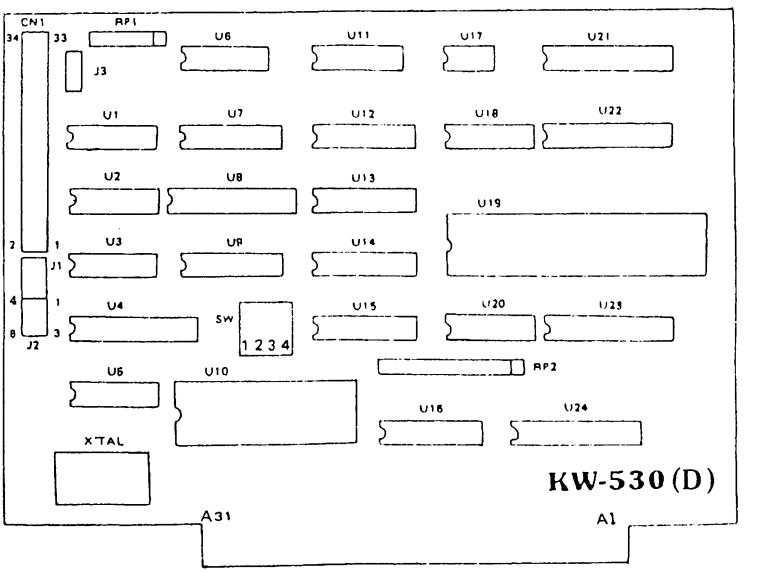
There are five models under KW-530 SERIES KW-530A, KW-530B, KW-530C are built around a similar board layout, while KW-530 and KW-530D belong to another category with a greater chip number on board.

BOARD LAYOUT OF KW-530A, KW-530B, & KW-530C



NOTE: SW1 and JP1 and the chips on U5 and U6 are installed on KW-530C only.

BOARD LAYOUT OF KW-530/KW-530D



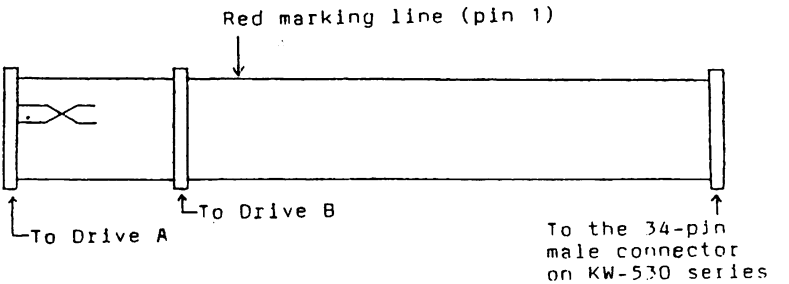
2– FEATURES

Use the following table to select the model most suitable to your needs:

	KW-530A	KW-530B	KW-530 & KW-530C,D
Host computer	8088/8086 CPU	80286/80386 CPU	8088/8086 or 80286/ 80386 CPU
Control two 1.2 MB or 1.44MB floppy drives	No	Yes 1.2MB No 1.44MB	Yes
Control two 360KB or 720KB floppy drives	Yes	Yes	Yes
Control two 360KB/ 720KB/1.2MB/1.44MB floppy drives	Yes, except 1.2/1.44MB	Yes, except 1.44MB	Yes
Coexists with hard disk drives	Yes	Yes	Yes
Special ROM to aid 8088/8086 BIOS to accept high capacity drives	No	N/A	Yes
Clock frequency	4 MHz	24 MHz	24 MHz

3— CONFIGURATION

When connecting any of the KW-530 series controllers to its interface cable, be sure to align the color striped edge of the cable with PIN 1 of the 34 pin connector on the controller. On the floppy drive side take note of the cut-out in the cable connector which must match the cut-out in the edge connector of the floppy drive.



FOR MODELS KW-530A AND KW-530B THERE ARE NO JUMPER OR SWITCH SETTINGS. Insert the controller card into the system's data bus and then proceed to Section 6 of this manual to run the setup program if necessary.

FOR MODELS KW-530, KW-530C and KW-530D set the jumper and switch settings as outlined in the next section.

4–1 DIP SWITCH SW OF KW-530, KW-530D

Use the following table to set the four levers of SW.

	Lever	Position
FDC control ROM at U10 activated, controls high capacity drives in 8086/8088 or 80286/80386 systems	1	On
FDC control ROM at U10 deactivated, controls high capacity drives in 80286/386 systems only.	1	Off

Lever 2 is not used.

LEVERS 3 AND 4 REQUIRE U10 TO BE ACTIVATED (Lever 1 On)

Drive A is 360KB or 720KB	3	On
Drive A is 1.2MB or 1.44MB	3	Off
Drive B is 360KB or 720KB	4	On
Drive B is 1.2MB or 1.44MB	4	Off

4–2 DIP SWITCH SW1 OF KW-530C

Use the following table to set the four levers of SW1.

	Lever Position	
Floppy drive C and D not in use for 8088/8086 system	1	Off
Drive B is 360KB or 720KB	2	On
Drive B is 1.2MB or 1.44MB	2	Off
Drive A is 360KB or 720KB	3	On
Drive A is 1.2MB or 1.44MB	3	Off
Hard disk drive controller installed	4	On
Hard disk drive controller not installed	4	Off

5—1 JUMPER BLOCK J2 OF KW-530, KW-530D

Jumper block J2 consists of six pins configured in two columns of three rows each. Each of the six pins is identified by its own number as shown in the following diagram.

```
4 • • 1
5 • • 2
6 • • 3
```

Pins 1, 2 and 3 are used to select the floppy drive control (FDC) address. Jumper pins 1 and 2 to select your primary floppy disk controller (FDC1) at location 3F0H through 3F7H.

```
4 • [•] 1
5 • [•] 2
6 • • 3
```

Pins 4, 5 and 6 are used to select the hard disk controller (HDC) status register address. U10 must be activated prior to using these settings (SW1 Lever 1 On).

```
4 [•] • 1
5 [•] • 2
6 • • 3
```

Jumper pins 4 and 5 if there is no HDC card installed in the system. This locates HDC1 at 1F7H.

```
4 • • 1
5 [•] • 2
6 [•] • 3
```

Jumper pins 5 and 6 if there is an HDC card already installed in the system. This locates HDC2 at 177H.

5—2 JUMPER BLOCK JP1 OF KW-530C

This two pin header is used to activate the high capacity drive control function. In 8088/8086 based systems you must short this jumper for all situations. In all the other systems, including the 8088/8086 and 80286/80386 based systems, short the jumper if you are using a 1.44MB / 720KB drive. In all other situations leave the jumper open.

6— SETUP

If you are using an 80286 or 80386 based system you must run the Setup program to update your system's configuration to include the drives you have just installed. See your computer system's User's Manual on how to run the Setup program.

To format diskettes use the commands listed in the following table:

DRIVE SIZE	FORMATTING COMMAND
360KB & 1.2MB	Format A: /S Format B: /S
720KB	Format A: /S/T: 80/N: 9 when using DOS 3.2 or 3.3 Format B: /S/T: 80/N: 9
1.44MB	Format A: /S/T: 80/N: 18 when using DOS 3.3 Format B: /S/T: 80/N: 18

If you are using a 1.44MB drive you must create or modify your system's CONFIG.SYS file. The following commands can be used to create this file.

A> Copy Con: Config.Sys [Enter]
— Device= Driver.Sys/D:0/T:80/S:18/F:7 [Enter]
— Device= Driver.Sys/D:1/T:80/S:18/F:7 [Enter]
— [F6] [Enter]

Your system will indicate one file has been copied. Now reboot your system using the [Ctrl], [Alt] and [Del] keys. Your system is now ready for use.

If you are using a 720KB drive you must create or modify your system's CONFIG.SYS file. The following commands can be used to create the file.

A> Copy Con: Config.Sys [Enter]
— Device= Driver.Sys/D:0/T:80/S:9/F:2 [Enter]
— Device= Driver.Sys/D:1/T:80/S:9/F:2 [Enter]
— [F6] [Enter]

Your system will indicate one file has been copied. Now reboot your system using the [Ctrl], [Alt] and [Del] keys. Your system is now ready for use.

NOTE : For dual 1.44MB drive users:

If your system contains dual 1.44MB drives the DOS "Diskcopy" command will work slightly differently for you. You cannot use the command "Diskcopy A: B:". In its place, use the command "Diskcopy C: D:" and the drives will copy exactly as they should.