

SUN-4310
Four Port Multi-Type Floppy
Disk Controller
User's Manual

- . INTRODUCTION:

SUN-4310 IS A INTELLIGMENT FLOPPY DISK CONTROLLER WHICH IS DESIGNED AS PER THE NEW SPECIFICATIONS OF DISK DRIVERS OF PC/XT, PC/AT, PC/AT-386 AND IBM PS/2 MODEL 30/50/60/80.

IT IS SUPPORTED TO BE USED AS A INTERFACE CARD ON YOUR PC/XT PC/AT, PC/AT-386 SYSTEM. IT WILL SUPPORT THE FUNCTION OF DISK DRIVES OF YOUR SYSTEM TO BE COMPATIBLE WITH IBM PS/2 MODEL 30/50/60/80 WHICH INCLUDING FORMAT, READ, WRITE VERIFY ETC . . .

THE MOST POWERFULL FUNCTION OF SUN-4310 FLOPPY DISK CONTROLLER IS THAT YOU CAN USE FOUR FLOPPY DISK DRIVER, FOUR FDD INTERNAL OR TWO INTERNAL AND TWO EXTRNAL, AND FORMAT < READ, WRITE > ANY KINDS OF DISK DRIVE SUCH AS 5.25" 360KB/1.2MB OR 3.5" 720KB/1.44MB DISK DRIVES. WHEN YOU USE SUN-4310 CARD, YOU DO NOT CARE THAT YOUR SYSTEM IS PC/XT, PC/AT OR PC/AT-386; YOU DO NOT CARE THAT YOUR SYSTEM BIOS IS AWARD, PHOENIX, OR AMI; AND THE SETUP < DIAGNOSTIC > PROGRAM IS SUPPORTED TO INSTALL 720KB/1.44MB DISK DRIVES FUNCTION OR NOT. ANY KINDS OF SYSTEM WITH DISK DRIVES CAN BE RUN UNDER SUN-4310 CARD.

NOTE: IF YOU USE SUN-4310 FORMAT DISKETTE HAVE SOME TROUBLE, SUGGEST YOU CHANGE DOS VERSION TO MS-DOS VERSION 3.3, OR PC-DOS VERSION 3.20 OR 3.3

THE DETAILED FUNCTIONS AS FOLLOWS:

A. IT CAN BE USED ON THE FOLLOWING SYSTEMS

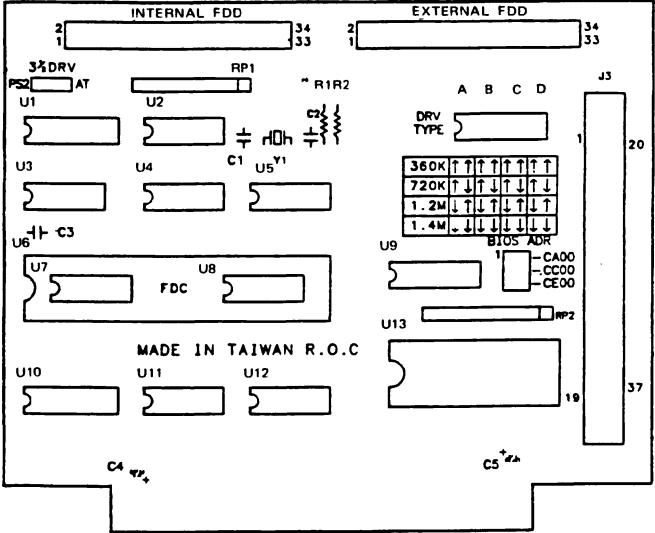
SYSTEM	CPU	CLOCK
PC	8088	4.77MHZ
PC/XT	8088	4.77MHZ/8MHZ/10MHZ
PC/XT	8086	6MHZ/8MHZ
PC/AT	80286	6M/8M/10M/12MHZ
PC/AT	80386	15MHZ/20MHZ/24MHZ

B. IT CAN CONNECT THE FOLLOWING FLOPPY DISK DRIVES.

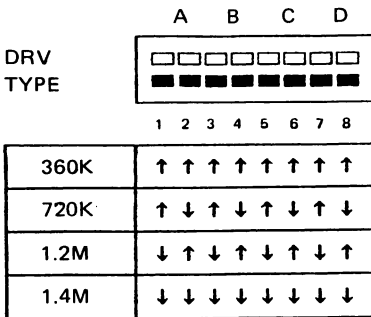
SIZE	TRANSFER RATE	CAPACITY
5.25"	250 KBS	360 KBYTE
	300 KBS	360KB/1.2MBYTE
	500 KBS	1.2 MBYTE
3.5"	250 KBS	720 KBYTE
	250 KBS	720KB/1.44MBYTE
	500 KBS	1.44MBYTE

二. JUMPER FUNCTIONS SETTING:

FIG 2-1 THE SUN-4310 PHISCAL COMPONENT SIZE:



(A) DRV TYPE: DRIVE TYPE SELECTION DIP-SWITCH



NOTE:

- ↑ IS SW ON
- ↓ IS SW OFF

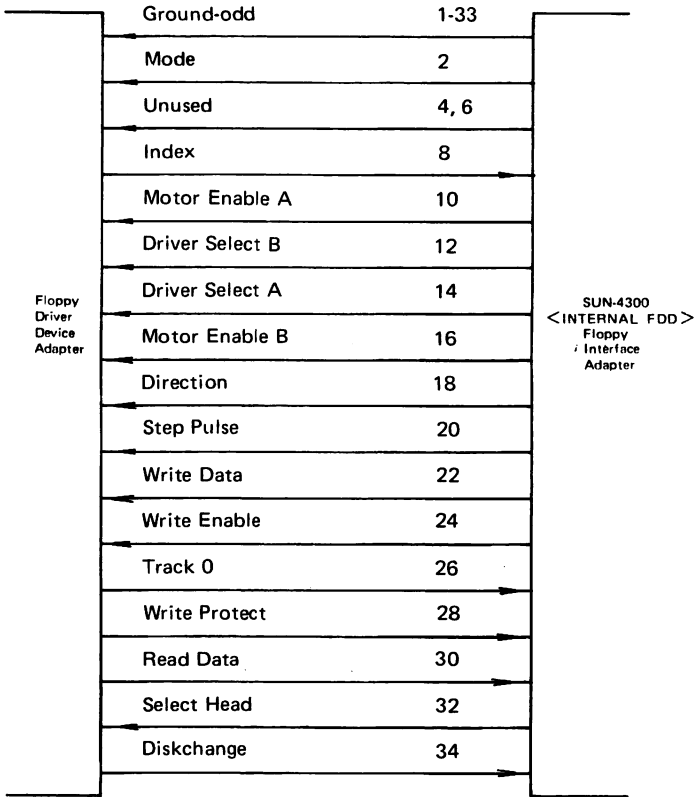
DRIVE	SW BIT		DEFINE
D R I V E A:	1	2	
	↑	↑	360KB
	↑	↓	720KB
	↓	↑	1.2MB
	↓	↓	1.4MB

DRIVE	SW BIT		DEFINE
D R I V E B:	3	4	
	↑	↑	360KB
	↑	↓	720KB
	↓	↑	1.2MB
	↓	↓	1.4MB

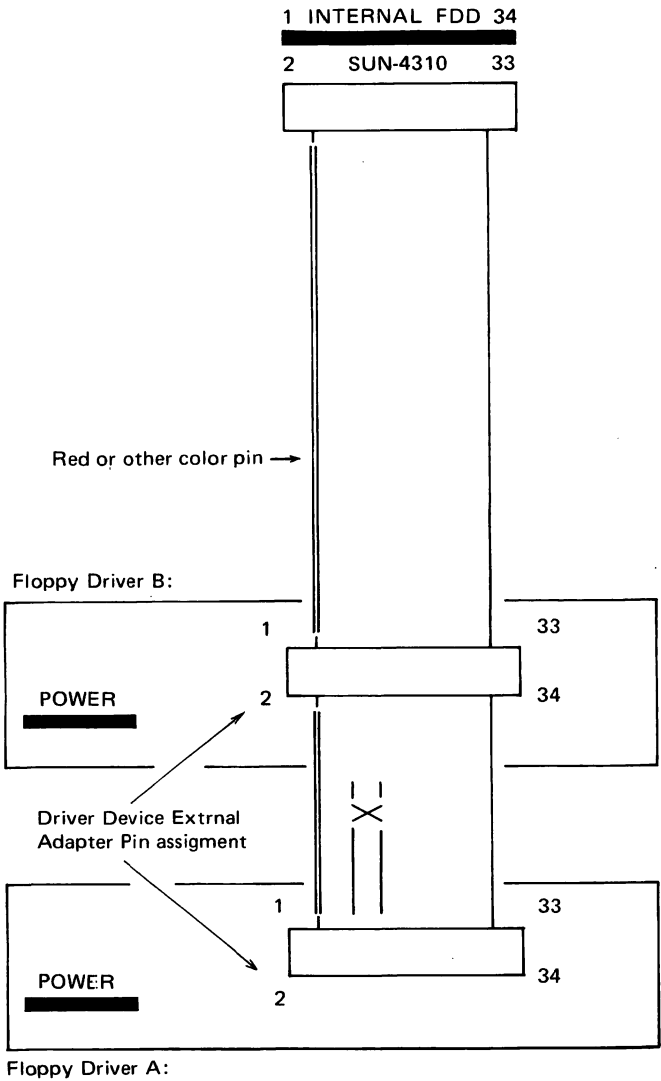
DRIVE	SW BIT		DEFINE
D R I V E C:	5	6	
	↑	↑	360KB
	↑	↓	720KB
	↓	↑	1.2MB
	↓	↓	1.4MB

DRIVE	SW BIT		DEFINE
D R I V E D:	7	8	
	↑	↑	360KB
	↑	↓	720KB
	↓	↑	1.2MB
	↓	↓	1.4MB

(B) INTERNAL FDD: Floppy Disk <DRV A: & B:> Cable Adapter



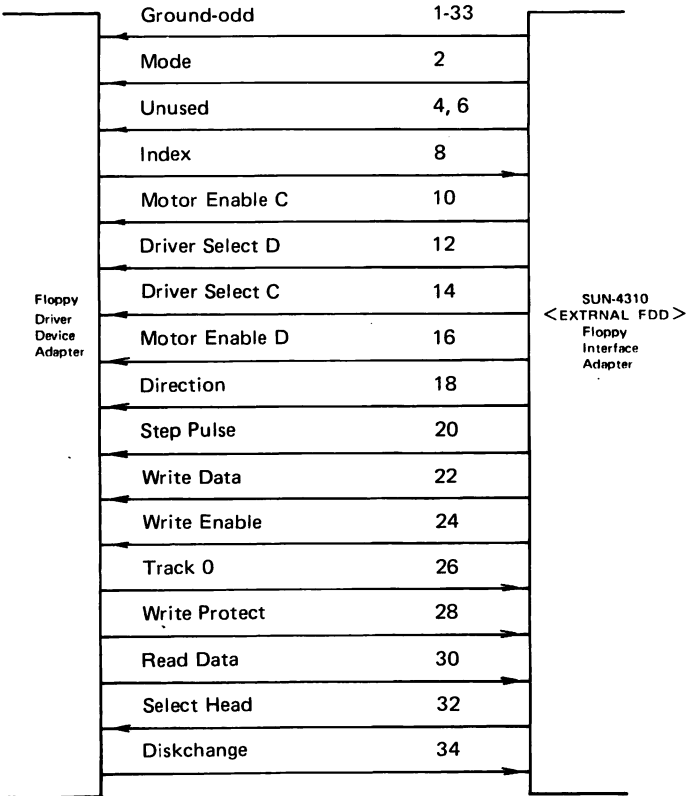
CABLE CONNECTION:



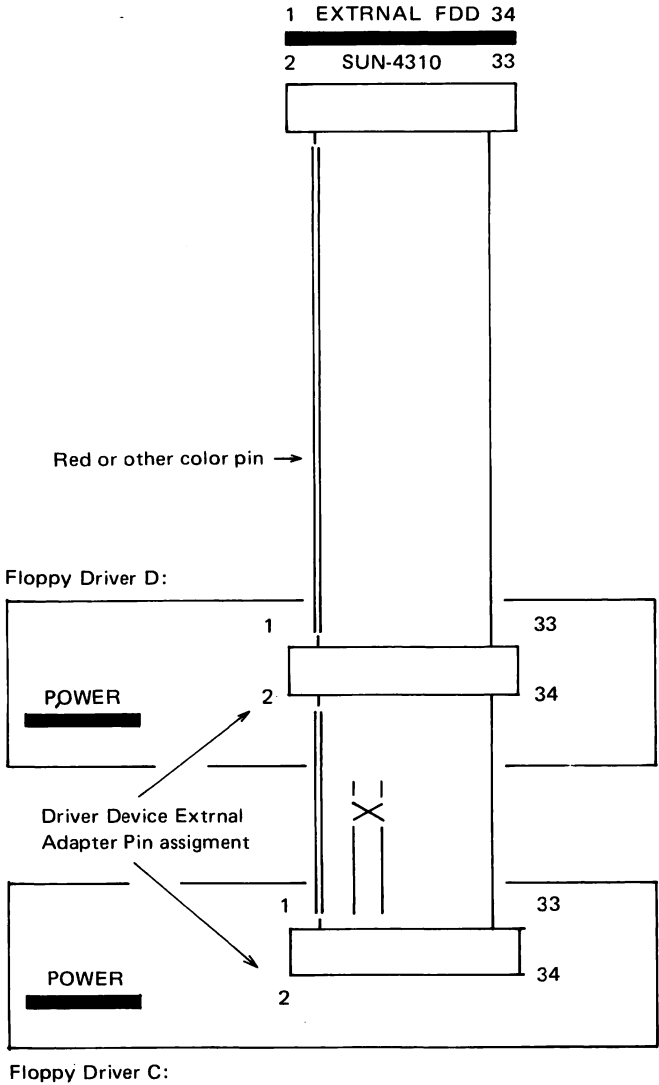
(C) EXTERNAL FDD: Floppy Disk <DRV C: & D:> Cable Adapter

THE DRIVER C: & D: CONNECTOR HAVE TWO, ONE OF EXTERNAL FDD CONNECTOR, OTHER IS 'J3', THE 'EXTERNAL FDD' CONNECTOR IS SUPPORT FLOPPY DISK DRIVE C: OR D: BUILD-IN COMPUTER SYSTEM CASE, THE 'J3' IS SUPPORT FLOPPY DISK DRIVE C: & D: EXTERNAL SIDE TO COMPUTER SYSTEM CASE.

FOLLOW IS EXTERNAL FDD CONNECTOR PIN ASSIGNMENT:



CABLE CONNECTION:

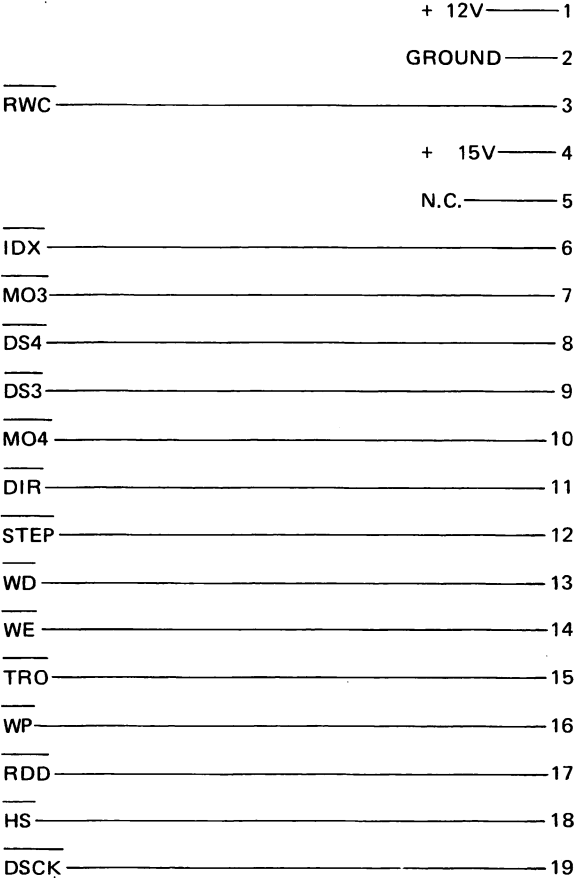


(D) J3: Floppy Disk < DRV C: & D:> Cable Adapter

J3 IS 37-PIN CONNECTOR, SUPPORT TO FLOPPY DISK DRIVER C: & D: FOLLOW IS EXTRNAL FDD CONNECTOR PIN ASSIGMENT:

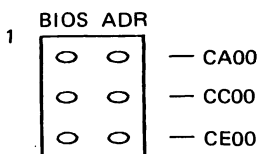
FLOPPY DISK DRIVE
INTERFACE

J3 CONNECTOR
SUN-4310



20-37 GROUND

(E) BIOS ADR: Floppy Disk BIOS Address Decode Position



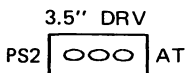
THE BIOS ADDRESS JUMPER IS SUPPORT FDC USED, OUR SUN-4310 ROM DECODE ADDRESS IS CHAGEABLE, BECAUSE THE ADDRESS LOCATION < HAX > CA00, < HAX > CC00, < HAX > CE00 POSSIBLE BE USED BY OTHER INTERFACE CARD AND IT'S ROM DECODED SAME LOCATION WITH SUN-4310, YOU MUST CHANGE SUN-4310 BIOS ADDRESS DECODE LOCATION. (EX: IF YOU HAVE ADAPTEK RLL HARD DISK CONTROLLER CARD, IT'S BIOS DECODED IN < HEX > CA00, SO, YOU MUST CHANGE SUN-4310 BIOS ADDRESS TO CC00 OR CE00).

PIN 1 - 2 CLOSE: ADDRESS DECODED < HAX > CA00

PIN 3 - 4 CLOSE: ADDRESS DECODED < HAX > CC00

PIN 5 - 6 CLOSE: ADDRESS DECODED < HAX > CE00

(F) 3.5" DRV SELECTOR: 3.5" FDD 1.44MB TYPE
SELECTOR



THIS JUMPER SELECT THE DRIVE TYPE OF THE 3.5" MINI-DRIVE, CONTROL DRIVE INTERFACE PIN-2, THE PIN-2 SIGNAL SEE FOLLOW:

MEDIA/TYPE	AT	PS2
HIGH DENSITY	HI	LO
NORMAL	LO	HI

YOUR DRIVE IS BELONG WHICH TYPE MINI-DRIVE, PLEASE CHECK THE MANUAL OF THE MINI-DRIVE.

THE FOLLOW IS SOME MINI-DRIVE TYPE, SUPPORT FOR REFERENCE:

MODE	BLAND	NO.
AT	TEAC	135HFN-410
PS/2	TEAC	135HFN-411
PS/2	TEAC	135HFN-511
PS/2	TEAC	135HFN-490
PS/2	SONY	MP-F17W
PS/2	YE-DATA	YD-701
PS/2	NEC	1137H-151
PS/2	MITUBISHI	MF 355C-12M
PS/2	EPSON	SMD 240L900

IF YOU DOESN'T KNOW WHAT THE TYPE YOUR DRIVE, PLEASE TEST FIRST SELECT JUMPER 'PS2' AND SECOND TEST 'AT' MODE.