How to connect more than one device to the SCSI port

When using more than one SCSI device on the Macintosh, it is necessary to set each device to a different ID number. The ID number is used by the computer to keep track of which drives are on the line, and which should be communicated with at any point in time.

For owners of DataFrame 20, 20XP, 40, and 40XP drives, there is a software utility which allows the SCSI ID number of the drive to be changed without ever touching the drive! **(Note: owners of DataFrame 20's may obtain an XP upgrade, which doubles the data transfer rates of the drive for $149)**.

If you have an original DataFrame 20 which does not support the change ID utility, the procedure for changing device ID numbers starts at number 1. For drives allowing software selectable ID's, skip ahead to step 7.

(1) Unplug the DataFrame and disconnect both the power cord and the cable to the Macintosh Plus.

(2) Remove the three phillips head screws on the rear and bottom of the DataFrame (these hold the cover in place), and carefully remove the casing.

(3) On the lower left hand corner of the OMTI controller card, you will see four jumpers that have plastic shorting pins hanging from them (see Fig. 1). When placed across vertical sets of pins, the connectors allow the user to give each DataFrame a specific address to help the Macintosh distinguish it from the other drives on the line. (See Fig. 2 below.) The pins are W1, W2, and W3. To change the DataFrame address from the factory setting of "0", follow the scheme below:

W1	W2	W3	address
0	0	0	0
1	0	0	1
0	1	0	2
1	1	0	3
0	0	1	4
1	0	1	5
0	1	1	6
1	1	1	7

Each device must have a unique address on the bus. Do not jumper W4; this set of pins is used to set the parity bit, and should not be modified. Once you have given a device a distinct identification number, you should mark the ID number on the rear of the DataFrame.

Never set the ID of a drive to 7, as this is the address of the Macintosh.

In the event that you should ever need to initialize your DataFrame, the ID number will be required by the initializer program to determine which drive on the SCSI bus should be reformatted. (For more information, see the section on formatting your hard disk.)

(4) If you are using only two drives, you will not need to do this step, go directly to step 5. If you will be chaining more than two drives examine the controller board just to the right of the 50-pin connector (fig. 2).   You will see three sets of socketed resistors. The resistors should be pulled out of all the drives except the first and final devices on the bus, where they should not be touched.

(5) Now that your drives have unique ID numbers, you should replace the cover. Connect the chained drives with an SCSI to SCSI cable. When using only two drives the order of the drives on the bus is inconsequential. When connecting more than two drives, make sure the drives at either end are the ones with the resisters installed.

(6) Turn on your Macintosh and both of your DataFrames. The device with the higher ID number always acts as the startup disk. You will have two DataFrame icons on your desktop. You are now ready to work.

Fig. 1

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|  __                                       |
| |  ||                                      |
| |  || \       The DataFrame controller board
| |  ||  \                                   |
| |  ||   \                                  |
| |  ||    \                                 |
| |  ||     \                                |
| |  || <----+---->Socketed resistors         |
| |  ||     /                                |
| |  ||    /----- 50 pin connector           |
| |  ||   /                                  |
| |  || L'                                   |
| |  ||                                      |
| |  ||   . . . .                            |
| |__||   . . . .                            |
|        W 1 2 3 4                           |
|_____|
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Fig.2

The shorting cable.

W 1 2 3 4

The jumper pins.

With the jumper configured like this, the pins read as a "1".

With the jumper like this, the pins read as a "0".
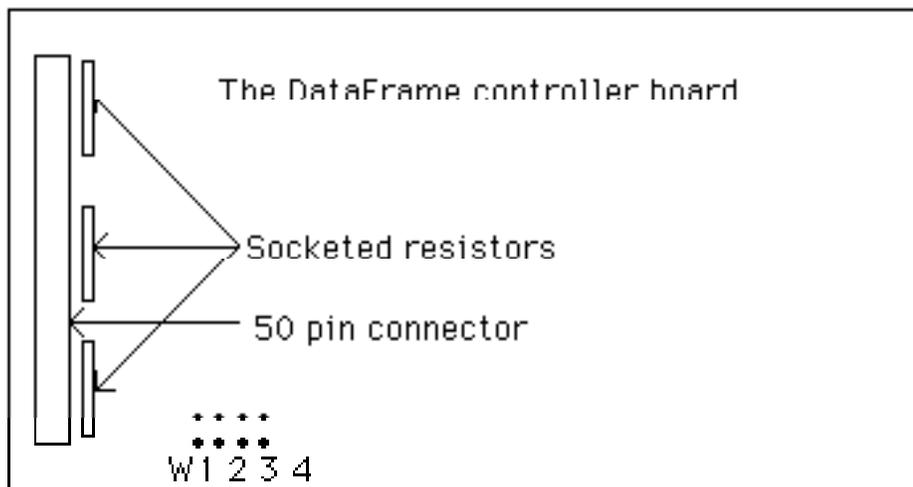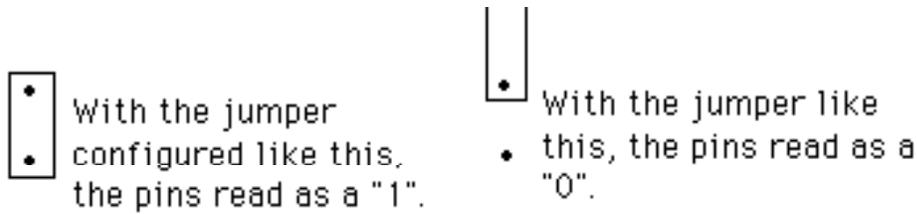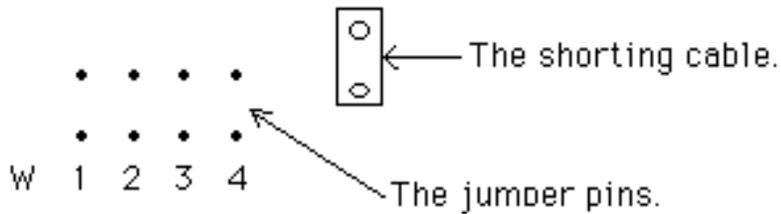
7) On 40 MegaByte, 20 XP, and regular DataFrames produced after the end of December, 1986, simply **copy the Change ID application to the drive whose ID you wish to change** and double click on it. A dialog box appears showing the current ID of the drive, and indicating the drive size. *On version 1.4 of the utility, you may not change the drive size.*

8) Enter the desired new device ID in the appropriate dialog box, and click on "Change ID". **Do not use the ID of another drive** on the line, or your system will be unable to reboot until one of the drives has been disconnected.

After reseting the drive's ID, the program will reboot your Mac, and the DataFrame will be ready for daisy-chaining.