Ethernet Adapter (250-5505/A) Jumper Settings Faxback Doc. # 5615 NOTE: For the "B" version, refer to the chart following this section. CLEAR CONFIGURATION JUMPER -- W1

The jumper at W1 is used to temporarily clear the adapter configuration and set the adapter's I/O base address to 280 (hex) so it can be accessed by the Setup Program. The jumper also disables the adapter's IRQ channel, RAM buffer, and ROM socket.

Use the jumper in the following situations:

- * The Tandy Ethernet Adapter will be installed in a computer with an existing option board that uses 240 (hex) for its I/O base address.
- * The Setup Program fails to recognize the Tandy Ethernet Adapter you need to configure.

When the jumper is installed, the I/O base address will be set to 280 (hex) each time the computer is turned ON. The jumper must be installed BEFORE computer power is turned ON for the clear configuration to occur.

With the jumper removed (the factory setting), the configuration stored in the adapter's memory will be used (either the factory default values or values saved during the Setup Program).

For example, if you install the Tandy Ethernet Adapter in a computer that already has an existing option board that occupies I/O space within the address range from 240 up to (but not including) 260 (hex), the Setup Program cannot access the adapter. By installing the jumper (and turning the computer power ON) the adapter's I/O base address will be temporarily set to 280 (hex).

Then you can use the Setup Program to access the adapter at 280 (hex) and select an I/O base address that does not conflict with an option board. You must then run the Setup Program and save a new configuration because the adapter IRQ will be disabled by the jumper. After saving the configuration in the adapter's memory, make sure to turn the computer power OFF and REMOVE the jumper at W1.

NOTE: In some cases, option boards are assigned to I/O space at both 240 and 280 (hex). You must either temporarily remove a conflicting board, or use another computer that does not conflict, to configure the Tandy Ethernet Adapter.





CLEAR CONFIGURATION JUMPER OPTIONS - W1

To use the clear-configuration jumper, do the following:

- 1. Save work in process. Turn the computer OFF, unplug the power cord, and remove the computer cover.
- 2. Install the jumper across both pins at W1. Insert the adapter and replace the computer cover.
- 3. Turn the computer power ON. The I/O base address will be temporarily set to 280 (hex).
- Use the Setup Program to select the adapter you just installed. The adapter will be listed at the "Board Type: 8003EB" with the I/O base address of 280 (hex).
- 5. Select and save a configuration for the adapter that does not conflict with existing option boards.
- Turn the computer power OFF, unplug the power cord, and remove the computer cover. Remove the jumper, replace the computer cover, and plug in the power cord.

When the computer power is turned ON, the Tandy Ethernet Adapter will use the configuration you saved in Step 5.

ROM INSTALLATION

To install an optional ROM, you must insert the ROM device into socket U1 on the adapter and verify the ROM size jumper settings at W9.

SELECTING THE ROM SIZE - W9

The Tandy Ethernet Adapter is preset at the factory to use a 16 Kbyte ROM device. The ROM size can be set to 16, 32, or 64 Kbytes. To verify the size of the ROM device you installed, check the documentation that accompanies the device.

The ROM size defined by the jumper setting must match the size you will save in the adapter's memory using the Setup Program. Configure the jumpers at W9 for the appropriate ROM size as shown in Table A-2.

ROM Size	ROM Type	W9	
16 Kbytes	27128	16K 0 0 16/32K 32/64K 0 0 64K	FACTORY SETTING



ROM SIZE OPTIONS - W9

To complete the ROM installation, you must do the following:

- * Define the ROM size (which also enables the ROM) and set the base address using the Setup Program.
- * Prepare your network software for ROM operation.

MEMORY SPACE REQUIREMENTS

The Tandy Ethernet Adapter must be assigned memory space within a range of addresses located above the base memory (typically 640 Kbytes) of your computer. The Tandy Ethernet Adapter may require as much as 70 Kbytes of memory space with its 8 Kbyte RAM buffer and the ROM device installed. Both the RAM buffer and the ROM device are located in the memory range C0000 to E0000 (hex). Other options boards that reserve memory space in the same range may conflict with the Tandy Ethernet Adapter. If no other option boards or software use memory space within that range, the adapter will function without conflict. If a memory space conflict is indicated by the Setup Program, use Table 1 to help select a different base address location.

RAM BUFFER BASE ADDRESS

An 9 Kbyte block of memory space must be assigned to the RAM buffer. The Setup Program is used to select the base address which defines the memory space occupied by the buffer. Depending on the software driver version, the following RAM buffer base addresses are recommended:

C4000 (hex) - Used by original driver versions for NetWare v2.0a and the NETBIOS/OSI Interface Program.

D0000 (hex) - Used by all driver software for NetWare v2.1 and later driver versions for NetWare v2.0a, 3+, and the NETBIOS/OSI Interface Program.

ROM DEVICE BASE ADDRESS

If an optional ROM device will be installed on the adapter, memory space must be assigned to the device. The Setup Program is used to define the ROM base address.

Depending on the size of the ROM device you will install, the recommended base address options are:

D8000 (hex) - Used for either 16 or 32 Kbyte ROM devices.

D0000 (hex) - Used for a 64 Kbyte ROM device. Note that D0000 (hex) may be occupied by the RAM buffer, requiring you to select a different RAM buffer base address.



	r	USED)		r
	(NOT			C2000
	USED)			LJ
	C0000	C0000	C0000	C0000
C0000>	LJ>	LJ>	LJ>	L]

*D0000 is the recommended RAM buffer base address. **D8000 is the recommended base address for the optional ROM.

NOTE: Always handle the adapter by its edges.

1. Jumpers located at W1,W2, and W3 are used to configure the Ethernet adapter.

W1 is used to set the $\ensuremath{\,\mathrm{I/O}}$ base address, IRQ level, and RAM.

Configuration Settings	W1
The soft jumper setting is used to configure the adapter ussing the setup program. 300.5.CA000 I/O Base Address = 240	W1 Soft XX 280.3.D0000
W1 I/O Base Address = 280 Soft IRQ = 3; Enabled 280.3.D00 RAM Base Address = D0000 300.5.CA0 Factory Default	
W1 I/O Base Address = 300 Soft IRQ = 5; Enabled 280.3.D00 RAM Base Address = CA000 300.5.CA0	

If neither of the two preconfigured settings is satisfactory (or if you are installing more than two adapters in the same computer), you MUST set the jumper to SOFT and run the soft-ware setup program to configure the adapter.

2. The jumper at W2 is used with an optional boot ROM device. It should be set to NONE/SOFT if you are not using a ROM device.

BOOT	ROM	OPTIONS	I	W2	
				1	2
NONE/SOFT			XXXXXXXX		
D8	3000			0	0

3. The jumpers at W3 are used to configure the adapter for thin Ethernet coaxial cable or standard (thick) Ethernet cable. It is set at the factory to use the thin Ethernet BNC connector. If standard (thick) Ethernet cable, or some other cable such as fiber optic, through an attachment unit interface (AUI) drop cable is to be used, move the jumper pair to the other set of pins. (DTC/jlc-03/28/94)