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TinyTurbo 286™

Update Bulletin

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TinyTurbo 286 Update Bulletin

INTRODUCTION

February 3, 1987

Dear Orchid Customer:

This Update Bulletin is designed to bring you important compatibility information, specific changes, and additions concerning your Orchid product. It provides the latest information to help you further optimize your product's performance.

TinyTurbo Installation

Installing the Cable

Be careful when installing the cable.

- Both ends of the cable must be installed exactly as described in the manual. The marking on the cable aims toward the indentation on the 8088 socket, which is toward the rear of an IBM PC.
- Be sure that every pin is in its socket.

Unusual Conditions When Cold-Booting

Problem: Your computer will switch into 80286 mode but will not cold boot (or switch) into 8088 mode.

- This is an installation error. The 8088 is installed incorrectly, usually backwards. The 8088 processor should be installed with the notch towards the board's adapter bracket (or "fill-plate").

Installing in Slot J7 or J8 of an XT

TinyTurbo comes with a short cable requiring you to install it in one of the slots closest to the XT's 8088 socket, close to the power supply. In the XT, slots J7 and J8 are close enough for the cable to reach. If possible, install TinyTurbo in J7, but not J8.

If You Must Use Slot J8

J8 is the closest slot to the 8088. It is not a normal slot because IBM intended it to be used for connection to an expansion chassis. Therefore, TinyTurbo must be specially configured for installation in J8. Even then, some systems may not operate properly. Here are the ramifications:

Jumper W1 not installed: If W1 is not installed (the factory configuration), some XTs will display an 1801 error message when you cold boot the system with TinyTurbo in J8. You may press the (F1) key to continue the boot process and TinyTurbo will work fine in the system. The message indicates that the system thinks the expansion unit is connected but not functioning, but of course this is not so. This is the preferred installation configuration if you receive no error during boot.

Jumper W1 installed: If you receive the 1801 error message during boot, and you do not want to have to press (F1) to continue the startup, then you need to install jumper W1. A subsequent topic on Jumper W1 explains how to do this. In some system configurations, however, installing W1 may cause an I/O address conflict with other boards installed.

I/O Address Conflict: The I/O address conflict occurs when another add-in board in your system is commanded via I/O addresses 200-21F. With W1 installed, TinyTurbo uses them to prevent the 1801 error message. These addresses are used by some game ports and some EMS boards. In some systems, you can tell the conflict exists because the EMM driver cannot find the EMS memory during the boot sequence. Check the user manuals for the add-in boards in your system. If you are using TinyTurbo with Orchid's Conquest EMS card or other boards that use those addresses, simply install TinyTurbo in slot J7.

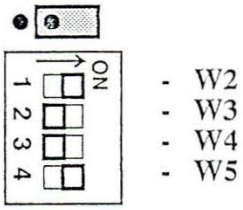
> **CAUTION:** Placing TinyTurbo in slot J8 when using add-on cards that require I/O addresses 200 - 21F hex causes an I/O conflict in IBM XTs. The solution is simply to put TinyTurbo in slot J7 and remove jumper W1.
>
> Check the manuals of your other add-on cards to verify that no I/O conflict exists before placing TinyTurbo in slot J8 of an IBM XT. You will void your warranty if you allow such a condition to exist.

TinyTurbo Product Changes

Cache Disable/Enable - Jumper W1

Jumper W1 is no longer used for enabling and disabling the cache. Please disregard the section in the manual on page 4 titled "Cache Disable / Enable." You need not worry about disabling the cache; TinyTurbo should run with the cache enabled for maximum performance.

W1



SW2

Jumper W1 - New Usage

TinyTurbo is shipped from the factory with jumper W1 removed and stored on one of the pins. Leave the jumper in this setting when installing TinyTurbo in IBM PCs and compatibles (or when installing it in IBM XT in a slot other than J8.)

- TinyTurbo installed in the IBM PC or compatibles: (factory setting)

Place the jumper labeled W1 over *both* of the pins when installing TinyTurbo in slot J8 of the IBM XT.

- TinyTurbo installed in slot J8 of an IBM XT:

Host Computer Memory Size

TinyTurbo 286 is now being shipped with a 4-position DIP switch for host computer memory size. This replaces jumpers 2 through 5 (sometimes referred to as W2 through W5) described on pages 4 and 5 of the TinyTurbo User's Manual.

The DIP switch, labeled SW1, is located next to the adapter bracket near the card-edge connector.

Positions 1 through 4 on the DIP switch correspond to the jumpers labeled 2 through 5.

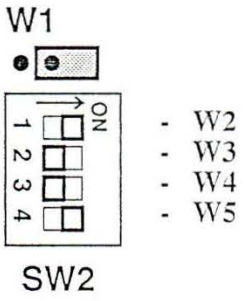
The TinyTurbo is shipped from the factory set for systems with 640K of DOS memory. If your system has a different amount of DOS memory, set the switch as shown below.

To set the switch for DOS memory size:

Slide the switches toward the adapter bracket to put them in the ON position, which corresponds to the what the manual calls "installing" the jumper.

The switch settings are as follows:

	JUMPERS:				
	2	3	4	5	
Host Memory	SWITCH: 1	2	3	4	
64K	off	off	off	off	
128K	on	off	off	off	
192K	off	on	off	off	
256K	on	on	off	off	
320K	off	off	on	off	
384K	on	off	on	off	
448K	off	on	on	off	
512K	on	on	on	off	
576K	off	off	off	on	
640K	on	off	off	on	- Default



- W2
- W3
- W4
- W5

ON is the same as having the jumper INSTALLED
OFF is the same as having the jumper REMOVED

The factory default is for 640K.