

Instructions



Memory Erasure and Nonvolatile Parts List TDS5000 & TDS5000B Series Oscilloscopes

071-1642-00

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Memory Erasure and Nonvolatile Memory Parts List

The standard TDS5000 and TDS5000B Series instruments contain an open architecture PC with an internal hard drive. TDS5000B Series instruments with Option FHD installed have a front-panel, removable hard drive that replaces the standard internal hard drive and the floppy drive. You can order additional removable hard drives, Tektronix part number 065-0692-00, to swap in and out of the instrument as needed for security reasons. This approach satisfies the security requirements specified by the Department of Defense in DoD 5220.22-M and is recommended for TDS5000B customers with data security concerns.

Memory Erasure

All user-storable data is stored on either the internal hard drive or the front-panel removable hard drive. There are DOD-approved scrubbing software packages available for the hard drive. Tektronix has no recommendations regarding the available packages. After the hard drive has been scrubbed, the operating system and oscilloscope software can be reinstalled using the Operating System Restore and Product Software CDs that ship with the oscilloscope. Following reinstallation of the operating system and product software, you need to run the Signal Path Compensation (SPC) procedure in the Utilities menu after a 20-minute warm-up period. This returns the oscilloscope hard drive to the initial state shipped from the factory.

Scrubbing the hard drive will not affect calibration of the instrument, since the factory calibration constants are stored on the acquisition board, entirely separate from any acquisition data or user files. You can completely erase or remove any secure data without affecting the calibration of the oscilloscope. You can also calibrate the oscilloscope in a nonsecure site, and then use the oscilloscope in a secure area without recalibration.

Floppy disk drives are standard on TDS5000 and TDS5000B models. Remove all floppy disks. These can be stored or destroyed.

Most TDS5000 and TDS5000B models include read/write capable CD-ROM drives. Remove all CDs. These can be stored or destroyed.

The following instructions give a method to disable the built-in USB and CD-RW capability for these oscilloscopes. Using the BIOS disables the devices for DOS programs, while the Windows Device Manager disables the devices for Windows programs. These procedures assume the intent is to disable both USB and the CD-RW to prevent their use.

NOTE. *If you disable the USB, CD-RW, and LAN in the following procedures, you cannot write new firmware to the hard drive. To do so, you will need to enable one of these items.*

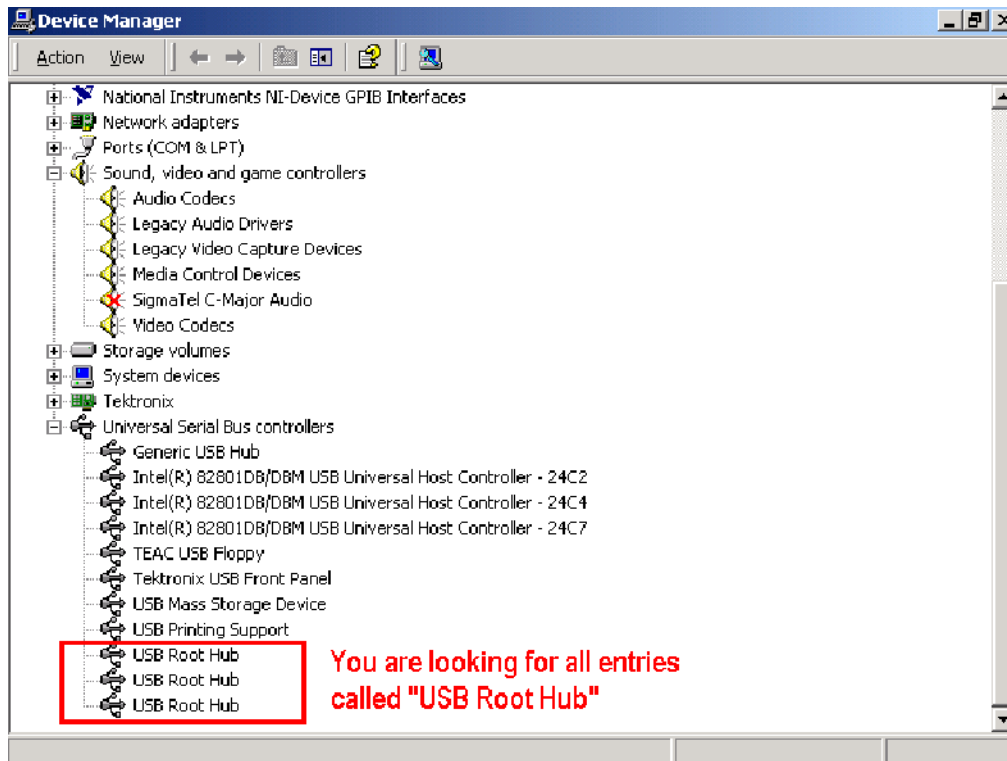
Disable USB and CD-RW

To disable USB and CD-RW for DOS via the BIOS:

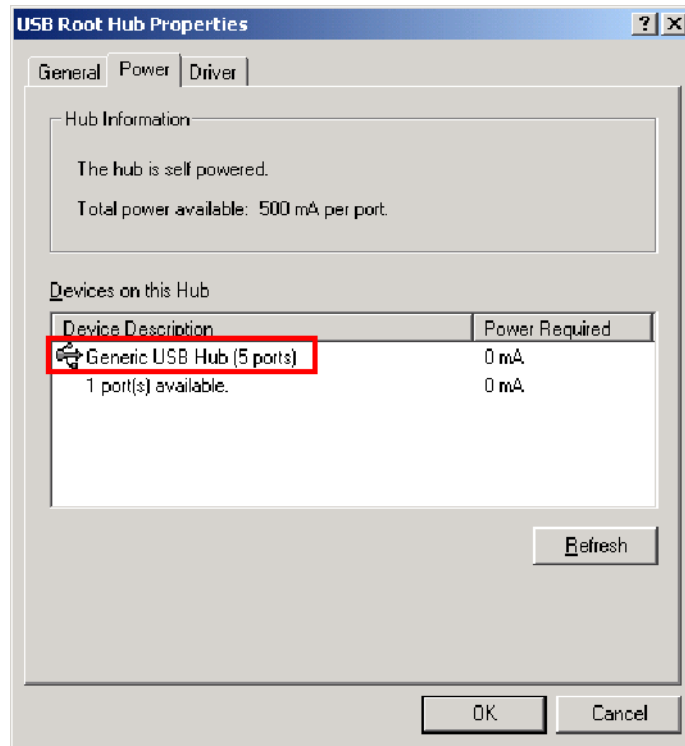
1. Press F2 during instrument Boot Up to go to the BIOS configuration menu.
2. Go to Advanced->USB Configuration.
3. Set High-Speed USB and Legacy USB Support to Disabled.
4. Hit Esc one time to return to the main BIOS configuration menu.
5. Go to Advanced->IDE Configuration.
6. Set IDE Controller to Primary (the CD-RW drive is in the secondary IDE bus, and is disabled).
7. Hit Esc one time to return to the main BIOS configuration menu.
8. Go to Security-> Set Supervisor Password. Press Enter.
9. Specify a password. You will be asked to confirm the password by entering it again. Note the password, and store it in a safe place for future use.
10. Set User Access Level to No Access.
11. Exit Saving Changes by pressing F10, and selecting OK.

To disable USB and CD-RW for Windows via the Windows Device Manager:

1. Connect a PS2 mouse and a PS2 keyboard to the oscilloscope before powering on (because USB will be disabled).
2. Log on to the oscilloscope as an administrator.
3. Right-click on My Computer on the desktop, and select Properties.
4. Select the Hardware tab.
5. Click Device Manager.
6. Expand the Universal Serial Bus controllers entry by clicking the “+” next to it. Your screen should look similar to the following...



7. Double-click the first USB Root Hub entry.
8. Select the Power tab.
9. If the Device Description is anything other than "Generic USB Hub (5 ports)", click the General tab, and select "Do not use this device (disable)" in the Device Usage drop-down list.



NOTE. It is critical to leave the USB Root Hub shown in the above graphic operating or the front panel of the oscilloscope will not function.

10. Click OK.
11. Repeat steps 7 through 9 for each USB Root Hub shown in the Device Manager window.
12. Expand DVD/CD-ROM drives in the Device Manager window.
13. Right-click TEAC CD-W224A (or similar), and select Disable.
14. Reboot the oscilloscope to make the changes effective.
15. We suggest that you password protect the Windows Administrator account and set up Guest accounts for end users so that these changes cannot be easily reversed.

Disable LAN Ethernet Connectivity

To disable LAN Ethernet Connectivity via the BIOS:

1. Press F2 during instrument Boot Up to go to the BIOS configuration menu.
2. Go to Advanced ->Peripheral Configuration.
3. Set Onboard LAN to Disabled.

4. Press Esc one time to return to the main BIOS configuration menu.
5. Press F10, and select OK to save changes and exit.

The LAN system will be disabled and no longer allow data traffic in or out.

Nonvolatile Memory Parts List

The nonvolatile memory parts used in the TDS5000 and TDS5000B oscilloscopes are shown in the following table.

Part number	Circuit board	Reference designator	Quantity	Description	Use	User access
156-8499-XX	Display Interface; Touch Screen	U2	1 ea	IC, Memory; CMOS, EEPROM; 2K, 256X8, 2.5V	Stores touch screen calibration alignment data	None
156-9183-XX	PC Interface	U720	1 ea	IC, Memory, CMOS, PROM, 1 M	Program PAI FPGA at boot up	None
156-8619-XX	PC Interface	U1320	1 ea	IC, Memory, CMOS, FLASH, 128 X 8 bit	Option Key, Event Log, IO Processor Code, Fan Cal Constants	None
156-6751-XX	Acquisition	U1800	1 ea	IC, Memory, CMOS, EEPROM, 2 k X 8	Calibration Constants, Probe Data	None

If you have any questions, contact the Tektronix Technical Support Center at <http://www.tektronix.com/support>.

