Data Lifeguard Tools







WD Data Lifeguard Tools

User Manual

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Introduction

WD provides Data Lifeguard Tools to assist with hard drive installation, management, and diagnostics. The Data Lifeguard Tools software is also available at *support.wdc.com/download*.

Depending on your setup and configuration, you can use either the Windows or DOS version of Data Lifeguard Tools.

Note: The Windows and DOS versions of Data Lifeguard Tools vary slightly from one another in text, graphic placement, or color.

The Data Lifeguard Tools main menu describes the functions of the program:

Western Digital	Data Lifeguard Tools™ _{? Негр}
Welcome to the Western Digital Data Lifeguard Tools hard drive installation program. Please choose an option.	View Installation Tutorial Instructions on how to connect a new hard drive to your computer.
	Set Up Your Hard Drive Set up a hard drive already connected to your computer.
	Utilities Drive-to-drive partition copy and other disk tools.
0	Hard Drive Information Jumper settings and other technical information about your hard drive.
	Sumper settings and other technical information about your hard drive.

- View Installation Tutorial Create, view, and print a customized installation manual.
- Set Up Your Hard Drive Partition and format an installed hard drive; overcome system BIOS limitations.
- Utilities Copy all files or a specific folder from one drive to another; reformat partitions or partition unallocated space.
- Hard Drive Information Configure jumper settings and other technical information regarding your hard drive.

2

Install Data Lifeguard Tools

- 1. Insert the Data Lifeguard Tools CD into your CD-ROM drive.
 - a) If using the Windows version, the CD autoruns on your desktop.
 - b) If using the DOS version, restart the computer and boot from the CD.
- 2. The Data Lifeguard Tools splash screen appears. Click the **Run Data Lifeguard Installation software** button.



4. Read the license agreement and if you accept the terms, click Yes.

icense Agreement		6	
Please read the following license agreement c	arefully.	6	
Press the PAGE DOWN key to see the rest of	the agreement.		
LICENSE AGREEMENT: TERMS AND CON	DITIONS OF USE		ŀ
IMPORTANT NOTICE. Read this License Ag	reement carefully bef	ore downloading or	
YOU ACKNOWLEDGE THAT YOU HAVE RE	EAD, UNDERSTAND	AND AGREE TO TH	ΗE
TERMS OF THIS AGREEMENT. IF YOU DO NOT DOWNLOAD THIS SOFTWARE, DO N	NOT AGREE TO TH OT USE THIS SOFT	IESE TERMS, DO WARE IN ANY WAY	
AND PROMPTLY RETURN THE SOFTWAR	E (AND ALL WRITT	EN MATERIALS AND)
DESTROY ANY COPIES OF THIS SOFTWA	RE IN YOUR POSSE	SSION.	1
Do you accept all the terms of the preceding L	icense Agreement?	f you choose No, th	в
setup will close. To install Data Lifeguard Too	is, you must accept th	nis agreement.	
allShield			

5. Click **Next** to begin installation.

tart Copying Files			6
Review settings before copying files.			é
Setup has enough information to start copyin change any settings, click Back. If you are copying files.	ng the program file satisfied with the s	s. If you want to ettings, click Nex	review or «t to begin
Current Settings:			
Data Lifeguard Tools will be installed into th C:\Program Files\Western Digital\Data L	e following folder: ifeguard Tools		1
Data Lifeguard Tools will be installed into th C:\Program Files\Western Digita\Data L	e following folder: iřeguard Tools		
Data Lifeguard Tools will be installed into th C:\Program Files\Western Digita\Data L IIShield	e following folder: ifeguard Tools		Ľ

6. Click Finish to complete installation.

Data Lifeguard Tools Version	11.2
	Data Lifeguard Tools installation complete.
	Setup has finished installing Data Lifeguard Tools on your computer. Run Data Lifeguard Tools now!
R	
CA	
	KBack, Finish Cancel

7. Remove the Data Lifeguard Tools CD from your CD-ROM drive and click OK.

Starting Data Lifeguard T	ools		×
Please remove the Data Life	eguard Tools CD from	the drive and click 'OK' to launc	h Data Lifeguard Tools.
	ОК	Cancel	

8. If necessary, click OK to the following message.

	Data Lifeguard Tools
į	Important: To avoid problems during installation and later sequences, please shut down all other running applications before continuing.
	For applications that load during operating system startup, consult the program documentation to determine how to prevent the application from loading.

- 9. Congratulations! Data Lifeguard Tools installation is now complete. The Data Lifeguard main menu appears and you may begin using the program (see x-reference).
- 10. Select any of the options in the Data Lifeguard Tools splash screen (see "Splash Screen Options" on page 4) or click **Exit** to exit out of the Data Lifeguard Tools splash screen.

Splash Screen Options

The following options are available in the Data Lifeguard Tools splash screen:

Western Digital	Data Lifeguard Tools™	
		Run DataLifeguard Installation software Create a Data Lifeguard Bootable Installation Diskette Download Latest Data Lifeguard Diagnostics Register your Western Digital Hard Drive
Martin Color		User Manual
macromeda	Adobe	Install Adobe Acrobat
FLASHED		EXIT

- Create a Data Lifeguard Bootable Installation Diskette If your system cannot boot from a CD or you prefer to use a floppy diskette instead, you can create a bootable Data Lifeguard Tools diskette by clicking this option.
- Download Latest Data Lifeguard Diagnostics Clicking this option takes you to the WD Data Lifeguard Diagnostics download page (Internet connection required). The Data Lifeguard Diagnostic Tools are used primarily for determining the physical condition of your hard drive. If you are having computer problems that you suspect are drive-related, you can test your drive with this tool.
- **Register your WD Hard Drive** Clicking this option takes you to the WD product registration page (Internet connection required).
- User Manual Clicking this option launches the user manual PDF file from the Data Lifeguard Tools CD.
- Install Adobe Acrobat Clicking this option launches the Adobe Acrobat Reader 6.0 program installer from the Data Lifeguard Tools CD.

3

Using Data Lifeguard Tools

Open the Data Lifeguard Tools program as follows:

- Windows Click the Start button and point to: Programs --> Western Digital - Data Lifeguard Tools.
- DOS Boot from the Data Lifeguard Tools CD or bootable diskette.

Western Digital	Data Lifeguard Tools [™] _{⊡ Help}
Welcome to the Western Digital Data Lifeguard Tools hard drive installation program. Please choose an option.	View Installation Tutorial Instructions on how to connect a new hard drive to your computer.
	Set Up Your Hard Drive Set up a hard drive already connected to your computer.
	Utilities Over-odrive partition copy and other disk tools.
	And the settings and duffer technical information about your hard drive.

View Installation Tutorial

This section allows you to create and print custom hardware installation instructions.

Note: The model number for your hard drive is printed on the label located on the top of the drive.

- 1. Select View Installation Tutorial from the Data Lifeguard Tools menu.
- 2. Data Lifeguard Tools asks you to select the interface of your hard drive. Click EIDE/ATA or SATA depending on your interface then click Next.

	<u> </u>
Western Digital	Data Lifeguard Tools™ _{⊇ негр}
Select the interface of your WD hard drive. Click Next to continue.	
C FIDE ATA	
C <u>S</u> ATA	
Help	Cancel Next

3. If you are using Windows, your default Web browser opens automatically and displays your custom instructions. If using the DOS version, your instructions are displayed in the window. Click Next to print the instructions.

Set Up Your Hard Drive

This section contains instructions for installing your new WD hard drive as a new boot drive or as an additional storage drive. For instructions on installing hard drives larger than 137 GB, see page 9.

Install a New Boot Drive

- 1. Select **Set Up Your Hard Drive** from the Data Lifeguard Tools menu. Data Lifeguard takes several moments to scan for system devices.
- 2. After Data Lifeguard Tools detects your installed hard drives, select the new drive that you want to format or partition as the new boot drive and click **Next**.



Note: Data Lifeguard does not format or partition a currently installed boot drive (the drive icon cannot be selected).

3. Select Installation Type as Add the drive as a boot device. To create customized partitions, select the box to change advanced options and check Custom Partition.

iŵD Western Digital	Data Lifeguard Tools	TM ? Help
Select how you would like t	o set up the drive "WDC WD800JB-00CRA1." To proceed with the default settings, clid	ck "Next."
Installation Type		
 Add the drive as an add Add the drive as the set 	ilitional storage device.	
Add the unve as the ne	w boor device.	
Select this box if you want to	change advanced options	
Advanced setup option	Option description	
Custom partition	Allows you to choose the number, size and type of partitions to be created.	
-		
Help	Cancel Back	Next

4. The Custom Partition Setup screen below appears. Your hard drive is automatically partitioned to the largest capacity based on your operating system limitations. For instructions on installing hard drives larger than 137 GB, see "Install a Drive Larger than

137 GB" on page 9. If the drive contains existing partitions and you want to create or add partitions, you must first click **Delete** to delete existing partitions. To add partitions, use the slider bar to size the partition, then click **Add Partition**. After setting the partitions, click **Next**.



5. The next screen outlines your setup options, number of partitions, file format, and the size of each partition. Data Lifeguard is now ready to set up your new hard drive. Click **Erase**, then **Next** to continue.

CAUTION: Continuing will erase all existing data on the hard drive. If you are certain, click Yes to proceed with format and partition.

6. After Data Lifeguard Tools completes formatting and partitioning the drive, the setup summary screen outlines all steps completed. Click **Done** to close or exit.



- 7. Choose from the following options:
 - a) If your newly formatted drive is jumpered as Slave, you must change the setting to Master and restart the computer.
 - b) If installing Windows, insert the Windows installation CD and restart the system. Follow the on-screen instructions to install the operating system.
 - c) If an operating system is already installed, restart the system.

This concludes the hard drive setup process. Your WD hard drive is now ready to use.

Note: Windows installation informs you that there is an existing partition on the drive. Since the drive was set up previously using Data Lifeguard Tools, you can bypass this function and proceed directly with Windows installation.

Install an Additional Storage Drive

1. Select **Set Up Your Hard Drive** from the Data Lifeguard Tools menu. Data Lifeguard takes several moments to scan for system devices.



2. After Data Lifeguard Tools detects your installed hard drives, select the new drive that you want to format or partition as an additional storage drive and click **Next**.



3. Select Installation Type as Add the drive as an additional device. To create customized partitions, select the box to change advanced options and check Custom Partition.

	00
iviD Western Digital	Data Lifeguard Tools [™] _{⊇ Help}
Select how you would like	to set up the drive "WDC WD800JB-00CRA1." To proceed with the default settings, click "Next."
Add the drive as an ac Add the drive as an ac Add the drive as the n Select this box if you want t	kitional storage device. sw boot device. o change advanced options
Advanced setup option	Option description
Custom partition	Allows you to choose the number, size and type of partitions to be created.
Help	Cancel Back Next

4. The Custom Partition Setup screen below appears. Your hard drive is automatically partitioned to the largest capacity up to 137 GB based on your operating system limitations. If the drive contains existing partitions and you want to create or add partitions, you must first click **Delete** to remove existing partitions. To add partitions, use the slider bar to the desired size of the partition, then click **Add Partition**. After configuring the partitions, click **Next**.

	Western Digital		in, in, in, in,, in,	Data Lif	eguard	Tools"	I Help
C III P	ustom Partition Setup for Wi the drive contains existing partition antitions, use the slider bar to size t	DC WD800JB-00CRA ns and you wish to create he partition, then click "A	1 (80028 MB) e or add partitions, you m add Partition.'' The slider	ist first click ''Delete bar shows the perce	" to delete existin entage of availabl	g partitions. T le space.	o add
		FAT16 FAT32 NTFS OTHER	Partition Size 1 40203 Mi	DLuster Size f K Bytes f	Partition Type		-
	02	100 %	<u>A</u> dd Partition	Dek	ete		Properties
-	Help			Ca	incel 🖉	Back	Next

5. The next screen outlines your setup options, number of partitions, file format, and the size of each partition. Data Lifeguard Tools is now ready to set up your new hard drive. Click **Erase** then **Next**.

CAUTION: Continuing will erase all existing data on the hard drive. If you are certain, click Yes to proceed with format and partition.

6. After Data Lifeguard completes formatting and partitioning the drive, the setup summary screen outlines all steps completed. Click **Done** to exit.

	08
Western Digital	Data Lifeguard Tools [™] ⊡ Help
The information below shows the steps completed an	d the steps remaining in the setup of your hard drive.
partitioned and formatted your new hard drive.	Drive model WDC WD2500BB-00DWA0 setup summary
Click Done to close Data Lifeguard and start using	Drive setup steps completed Partitioned drive.
you new unve.	Formatted drive.
	Drive setup complete.
Help	Done

A new drive letter and icon appear under **My Computer**. This concludes the hard drive setup process. Your WD hard drive is now ready to use.

Install a Hard Drive Larger than 137 GB

To access the full capacity of a drive larger than 137 GB, you must follow the instructions below. Choose the steps according to your operating system.

CAUTION: Formatting a drive past the 137 GB barrier on a system that does not meet the requirements below results in data loss.

Windows 98SE/Me

Recommended Solution: If your system does not support 48-bit Logical Block Addressing (LBA), WD recommends installing an Ultra ATA controller card to access the full capacity of your hard drive greater than 137 GB. Be sure that your system BIOS supports the card and that its drivers are installed properly before connecting the hard drive. You can purchase an Ultra ATA/100 PCI controller card at the WD Online Store at *store.wdc.com* or your local computer retailer.

Alternate Solution: Intel[®] offers drivers for certain chipsets which provide BIOS support for the full capacity of drives larger than 137 GB. Contact the manufacturer of your motherboard or system for compatibility and installation instructions.

Windows 2000/XP

- 1. Download and install the latest Service Pack (SP) updates to your operating system from Microsoft at *windowsupdate.microsoft.com*. The following versions natively support drives larger than 137 GB:
- Windows XP, SP1 or higher
- Windows 2000, SP3 or higher
- 2. Select **Set Up Your Hard Drive** from the Data Lifeguard Tools menu. Data Lifeguard takes several moments to scan for system devices..



3. Select the drive that you want to format or partition and click Next.

4. The following message appears warning you that the drive you are setting up is larger than 137 GB. Click **Partition to Full Size**.

Drive Size Warning	8				
Warning: The drive you are setting up is larger than 137 Gigabytes. Most ATA disk drivers that ship with Windows do not support drives larger than 137 GB.					
To avoid the possibility of data corruption, Western Digital strongly recommends that you create all partitions below the 137 GB limit unless you are sure that your ATA drivers support drives larger than 137 GB.					
For more information regarding the 137 GB barrier, click the Help button.					
Limit Drive Size To 137 GB Partition To Full Size Help Cancel					

5. Choose your Installation Type. To create customized partitions, select the box to change advanced setup options and check **Custom Partition**. If Data Lifeguard Tools detects Windows XP SP1(or higher) or Windows 2000 SP3 (or higher), Dynamic Drive Overlay (DDO) is selected automatically and installed in the next step. DDO is a device driver that overcomes your system's BIOS limitations to achieve full drive capacity. Click **Next**.

iiii Western Digital	Cata Lifeguard Tools™
Select how you would like	to set up the drive "WDC WD2500BB." To proceed with the default settings, click "Next."
Add the drive as an ac Add the drive as an ac	Iditional storage device.
Select this box if you want t	o change advanced options
Advanced setup option	Option description
Custom partition	Allows you to choose the number, size and type of partitions to be created.
Dynamic Drive Overlay	Dynamic Drive Overlay (DDO) is used to overcome BIOS limitations to achieve full drive capacity.
Help	Cancel Back Next

6. After Data Lifeguard Tools displays the steps completed, click **Done** to exit and begin using your new drive.

Utilities

Select Utilities from the Data Lifeguard Tools menu to access the following options:

	08
Western Digital	Data Lifeguard Tools [™] ₂ _{Help}
Select a Utility Option and click the Next button Quick Help Select an option on the right to see more information.	lo continue. C Drive-to-Drive Data Copy C Reformat Partitions C Partition Unallocated Space
Help	Cancel Next

Drive-to-Drive Data Copy

The Drive-to-Drive Data Copy option allows you to copy files from one drive to another. This feature is useful if you want to replace your existing bootable hard drive with a newer, faster hard drive.

- 1. Click Drive-to-Drive Data Copy, then click Next.
- 2. Select the **Source** and **Destination** paths with the selected folders. You can click **Browse** to easily access the folder or files on both hard drives.

Note: Existing files on the destination hard drive are overwritten when there are files on the source drive with the same name.

3. After selecting the folder for each path, click **Start** to begin copying the drive. Progress bars for the current file being copied and the overall progress are displayed.

	.
Western Digital	Data Lifeguard Tools [™] _{⊇ Help}
Select the "Source" and "Destination" paths, then click the '	'Start'' button to begin copying files. Tip: If the copy does not
complete successfully, run ScanDisk and Defrag on the sou	ce drive and try again.
C.\Program Files\Western Digital Browse	EX Browse
Progress For Current File CyProgram FilesWestern Dinital/Data Lifeguard	
,	
Overall Progress	File 53 of 53
	·
Start	Stop
Help	Cancel Next

- 4. When the copy operation is complete, click **OK** to display the results summary. Click **Done** to exit Data Lifeguard Tools.
- 5. Restart the computer to use your new WD hard drive.

Reformat Partitions

- 1. Click Reformat Partitions, then click Next.
- 2. Select a drive from the list and click Next.
- 3. Click the box next to the partition(s) in the list.

W	Western Digital	'	i dan kan kan	n, ha kan, k	Data Lifeguard	Tools [™] _{? Help}
Select partitions to formal by checking the box next to the partition in the list view below. Once you have selected a partition to format, click the 'Update Partition Info' button to change the volume label or cluster size of the partition. When all changes are complete, click Next to format the partition(s). NOTE: Reformating a partition with existing data will cause all data on the partition to be lost.						
# □ 1 (C;) □ 2 (D;) □ 3 (E;)	Label	Type NTFS NTFS NTFS	Cluster Size 4K Bytes* 4K Bytes* 4K Bytes*	Size 41943 MB 20975 MB 17101 MB	Description Boot partition and Windows Drive Data Data	R.
Update F	Partition Info				* = Def	fault Cluster Size
Help					Cancel	Back Next

- 4. Click **Update Partition Info...** to change the volume label or cluster size of the partition. *Note:* Reformatting a partition with existing data will result in the loss of all data on the partition.
- 5. When the reformat operation is complete, click **Done** to exit Data Lifeguard Tools.
- 6. Restart the computer.

Partition Unallocated Space

- 1. Click Partition Unallocated Space, then click Next.
- 2. Select a drive from the list and click Next.
- 3. Click Next to partition the unallocated space on your drive.

	<u> </u>
Western Digital	Data Lifeguard Tools™ _{⊇ Help}
Data Lifeguard Tools is ready to perform the following maintenance	e option on your selected drive.
Drive model WDC WD	2500BB-00DWA0 setup options
Data Lifeguard Tools will create a new partition in the Partition 4: Volume Label NEW VOLUME, Type	unallocated space on this drive. The partition will be created as folk NTFS, Cluster Size 512 Bytes, Size 8.0MB
Help	Cancel Back Next

- 4. When the partition operation is complete, click **Done** to exit Data Lifeguard Tools.
- 5. Restart the computer.

Hard Drive Information

This feature allows you to view the drive model, serial number, capacity, UDMA mode, and other details about the selected hard drive.

- 1. Insert the Data Lifeguard Tools CD into your CD-ROM drive. Select Hard Drive Information from the main menu.
- 2. In the next window, you can select either View Hard Drive Information or View Jumper Settings.
 - a) *View Hard Drive Information* Once your drive is detected, click the tab for **Partition Table** or **IDE Information** to display data regarding the type of drive format, LBA support, DMA support, firmware revision, etc. Click **Done**.

ifiD Western Digital	Data Lifeguard Tools [™] _{⊇ нец}
Model: WDC WD2 Serial Number: WD-WMAE	50082-000WA0 H1025597
The tabs on the right display advanced hard drive information. Click "Back" to view information for a different drive.	Patition Table [IDE Information] - Size
	MW DMA Suport U,1,2 MW DMA Active MW DMA Cycle Time 120 ns Min Cycle/Word 120 ns Ultra DMA Support 0,1,2,3,4,5 Ultra DMA Active 2,
	Misc. Firmware Revision N/A S.M.A.R.T. Support Enabled ATA # supported 6, 5, 4, 3, 2 IORDY Support Yes R/W Multiple Yes Sectory/Block 16
	PIO Mode Support 3.4 PIO Cycle Time 120ns
Help	Cancel Back Done

b) *View Jumper Settings* — To view the jumper settings for your WD hard drive, see the printed label on top of the drive. For additional information on jumper settings, visit *support.wdc.com*. Click **Done**.



Install the Hard Drive in a Macintosh System

You can install two IDE/ATA hard drives on the same cable with the Master/Slave jumper configuration in the following Macintosh systems:

- Power Mac[®] G4 and higher
- Power Mac G3 (blue and white colored, limited to certain configurations)
- Power Mac G3 All-in-One (limited to certain configurations)

A Power Mac with a U-shaped mounting bracket installed in the rear drive bay is capable of supporting dual IDE/ATA drives, allowing two drives to be installed in that bay. For more information on Master/Slave support in Power Macs G3 or G4, refer to Apple support article 24342 at *www.apple.com*.

Important: For detailed setup and installation instructions specific to your Macintosh system, refer to your original Apple Setup Guide or visit *www.apple.com/support*.

You can install the hard drive according to one of the following system configurations:

- If your system does not support the Master/Slave configuration, you are limited to installing one IDE/ATA device per channel for a maximum of two IDE/ATA devices.
- To install a drive greater than 137 GB, you must install a Macintosh-compatible Ultra ATA/100 controller card. Be sure that the Ultra ATA drivers are installed properly before connecting the hard drive.
- To install a hard drive smaller than 137 GB as an additional hard drive in a Power Mac, follow the steps below.

Install a Hard Drive Smaller than 137 GB (Additional Drive)

1. Cable Select is the default jumper setting of your WD hard drive, so you must change the configuration to Slave. The drive that came with the Macintosh is already designated as Master (Master ID=0, Slave ID=1).

Note: Cable Select mode is not supported by Macintosh's built-in IDE/ATA controller. You must use the Master/Slave jumper setting.

- 2. Before handling the hard drive or any other components, discharge static electricity by touching the metal chassis of your computer or by wearing a grounding strap.
- 3. Power off the computer, and unplug the power cord.
- 4. Remove the computer system's outside cover (if necessary, refer to your computer system manual for instructions).
- 5. Install the hard drive in your Macintosh system using the interface cable supplied with your Power Mac.
- 6. Use the Apple Disk Utility on the Macintosh operating system CD to format and partition the drive.
- 7. Remove the CD and restart the computer to use your new WD hard drive.

4

Service and Support

If you need additional information or help during installation or normal use of this product, visit our product support Web site at *support.wdc.com* or send an e-mail message to WD Technical Support using the online form.

You may also call the phone numbers listed below. When calling for support, have your WD hard drive serial number, system hardware, and software versions available.

	USA/Canada/Outside USA (Central Time)	Europe (Central European Time)
Telephone Numbers	800.ASK.4WDC	+31.20.4467651
Monday – Thursday	9:00 am – 7:00 pm	9:30 am – 12:00 noon 1:00 pm – 5:30 pm
Friday	9:00 am - 5:00 pm	9:30 am – 12:00 noon 1:00 pm – 4:00 pm
Saturday	8:00 am – 5:00 pm	