# vite BootIt

Copyright @ 1996, 1997, 1998 TeraByte Unlimited. All Rights Reserved.

## **Installation and Getting Started Guide**

### **Revision 1.00**

Printed April 18, 2021

**ASP** Member

TeraByte Unlimited 258 N. Saturmino Dr. Palm Springs, CA 92262 TeraByte@TeraByteUnlimited.com http://www.TeraByteUnlimited.com

#### **Ombudsman Statement:**

This program is produced by a member of the Association of Shareware Professionals (ASP). ASP wants to make sure that the shareware principle works for you. If you are unable to resolve a sharewarerelated problem with an ASP member by contacting the member directly, ASP may be able to help. The ASP Ombudsman can help you resolve a dispute or problem with an ASP member, but does not provide technical support for members' products. Please write to the ASP Ombudsman at 157-F Love Ave., Greenwood, IN 26142 USA, FAX 317-888-2195, or send email to omb@asp-shareware.org.

#### **Definition of Shareware:**

Shareware distribution gives users a chance to try software before buying it. If you try a Shareware program and continue using it, you are expected to register. Individual programs differ on details – some request registration while others require it, some specify a maximum trial period. With registration, you get anything from the simple right to continue using the software to an updated program with printed manual.

Copyright laws apply to both Shareware and commercial software, and the copyright holder retains all rights, with a few specific exceptions as stated below. Shareware authors are accomplished programmers, just like commercial authors, and the programs are of comparable quality (In both cases, there are good programs and bad ones!). The main difference is in the distribution. The author specifically grants the right to copy and distribute the software, either to all and sundry or to a specific group. For example, some authors require written permission before a commercial disk vendor may copy their Shareware.

Shareware is a distribution method, not a type of software. The Shareware system makes fitting your needs easier, because you can try before you buy. Also, because the overhead is low, prices are low. Shareware has the ultimate money-back guarantee - if you don't use the product, you don't pay for it.

#### LIMITED WARRANTY

THIS SOFTWARE AND MANUAL ARE PROVIDED FOR EVALUATION ONLY, ON AN "AS IS" BASIS. TERABYTE UNLIMITED DISCLAIMS ALL WARRANTIES RELATING TO THIS SOFTWARE, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER TERABYTE UNLIMITED NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION, OR DELIVERY OF THIS SOFTWARE SHALL BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH SOFTWARE, EVEN IF TERABYTE UNLIMITED HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR CLAIMS. THE PERSON USING THE SOFTWARE BEARS ALL RISK AS TO THE QUALITY AND PERFORMANCE OF THE SOFTWARE.

This agreement shall be governed by the laws of the State of California and shall inure to the benefit of TeraByte Unlimited and any successors, administrators, heirs and assigns. Any action or proceeding brought by either party against the other arising out of or related to this agreement shall be brought only in a STATE or FEDERAL COURT of competent jurisdiction located in Riverside County, CA. The parties hereby consent to in personam jurisdiction of said courts.

#### Trial Use License

BootIt is NOT a public domain program. It is copyrighted by TeraByte Unlimited. This software and accompanying documentation are protected by United States copyright law and also by international treaty provisions.

TeraByte Unlimited grants you a limited license to use this software for evaluation purposes for a period not to exceed thirty days. If you continue using this software after the thirty-day evaluation period, you MUST make a registration payment to TeraByte Unlimited.

You may not use, copy, rent, lease, sell, modify, decompile, disassemble, otherwise reverse engineer, or transfer the licensed program except as provided in this agreement. Any such unauthorized use shall result in immediate and automatic termination of this license. All rights not expressly granted here are reserved to TeraByte Unlimited.

#### Limited Distribution License

ASP Approved Vendors in good standing may distribute Bootlt, completely unaltered, without further permission; Non-ASP member vendors must request permission prior to distributing this package.

Permission to distribute the BootIt package is not transferable, assignable, saleable, or franchisable. Each vendor wishing to distribute the package must independently satisfy the terms of this limited distribution license.

<u>U.S. Government Information</u>: Use, duplication, or disclosure by the U.S. Government of the computer software and documentation in this package shall be subject to the restricted rights applicable to commercial computer software as set forth in subdivision (b)(3)(ii) of the Rights in Technical Data and Computer Software clause at 252.227-7013 (DFARS 52.227-7013). The Contractor/manufacturer is TeraByte Unlimited, 258 N. Saturmino Dr., Palm Springs, CA 92262.

TeraByte Unlimited may revoke any permissions granted here, by notifying you in writing. All rights not expressly granted here are reserved to TeraByte Unlimited.

#### How To Register:

If you continue to use Bootlt beyond 30 days you must register it. It is illegal to continue using Bootlt without registering. Registration brings some additional features. One is the maintenance password. Once set, it must be entered before a user can display the maintenance menu. You will also be able to customize the message displayed in the box below the main menu. You can enter any text you want to display. If you have exceeded the registration period, registering will also remove the registration reminder prompts that you are receiving.

New software or future versions of software contained with the Bootlt package may be created and sold as a separate product, some of which will only be available to registered Bootlt users.

When you register the software you will be sent a registration key, name, and number. The registration name will be the name on the order form. It must be either your name or the name of your company.

The registration price depends on what you order and how it's delivered. The base price is \$39.95. See the order form for details.

For your convenience, there are two *order services* you can use to register. You can also register on-line via the TeraByte Unlimited web site!

- 1) You can use the CompuServe Shareware Registration Service (GO SWREG). Registration Number: 5923
- 2) You can order with MC, Visa, Amex, or Discover from Public (software) Library by calling 800-2424-PsL or 713-524-6394 or by FAX to 713-524-6398 or by Email to 14938@pslweb.com. You can also mail credit card orders to PsL at PO Box 35705, Houston, TX 77235-5705. Product Number 14938.

#### THE ABOVE PHONE NUMBERS ARE FOR <u>CREDIT CARD ORDERS</u> <u>ONLY</u>. THEY ARE NUMBERS TO AN <u>ORDER SERVICE</u>. ALL REQUESTS FOR INFORMATION MUST BE DIRECTED TO TERABYTE UNLIMITED WHICH <u>CANNOT</u> BE REACHED AT THESE NUMBERS.

Any questions about the status of the order or shipment, refunds, registration options, product details, technical support, volume discounts, dealer pricing, site licenses, non-credit card orders, etc., must be directed to TeraByte Unlimited, (760) 325-0892, TeraByte@TeraByteUnlimited.com, 258 N. Saturmino Dr., Palm Springs, CA 92262.

We will be notified the day of your order and will e-mail/ship the registration information directly to you.

#### Support Policy:

The primary support communication method will be use of on-line services. The most resent versions of software and information will be available at the TeraByte Unlimited web site.

(http://www.TeraByteUnlimited.com).

Registered users that require technical support should try to use e-mail as the primary communication method. Telephone support will also be given as needed.

Pre-sale information and technical support for unregistered users will be given via e-mail only.

In all cases TeraByte Unlimited reserves the right to refuse any communication method that would incur a cost.

#### System Requirements:

100% IBM compatible personal computer with an i80386 compatible microprocessor and at least one diskette drive and one hard drive with a FAT or FAT32 partition with at least 500K of free space.

#### <u>Before you Begin</u>

TeraByte Unlimited has taken every effort to make BootIt as safe as possible; however, it is *not possible* to provide a 100 percent guarantee of safety.

*Before* using Bootlt on any system for the first time, **BACK UP ALL DATA on ALL HARD DRIVES**. It's better to be safe than sorry.

It's always a good idea to have a system disk, such as a DOS boot diskette or Windows 95 Startup Diskette, that can be used to boot your system should something ever go wrong. You should configure the diskette to give you all the function you may need. This includes adding any drivers or utilities as well as configuring the configuration files.

To create a DOS boot diskette use the DOS *FORMAT A:/S* command. You should also copy the following external commands to the diskette: SYS, FDISK, FORMAT, ATTRIB, and DEBUG. If you think you may need access to your CD ROM drive or another device then be sure to copy the required drivers to the diskette. Windows 95/98 users can use the "Startup Disk" tab to create the diskette.

#### What BootIt Lite Does:

- Hide and unhide partitions and volumes on the fly in real time.
- Configure up to 100 boot configurations to fit your needs.
- Boot from any partition or up to 48 volumes on up to eight hard drives.
- Boot multiple operating system from a single FAT or FAT32 partition.
- Logical swap hard drives in order to boot DOS from a hard drive other than the first.
- Boot from the A: or B: drive on the fly.
- Create boot menus for individual users.
- Easy installation
- Partition naming
- Supports Hard Drives larger than 8GB
- Works with your favorite partitioning software
- and much, much, more...

#### Limitations:

Bootlt relies on the BIOS for processing disk functions. If your computer BIOS limits access to the hard drive for any reason, Bootlt will also be limited. The BIOS "large" mode is not supported.

#### **Getting Started**

- 1) Make sure you have read the previous section titled "Before You Begin".
- 2) If you need to create a system diskette (such as a DOS boot diskette or Windows 95/98/NT Startup Diskette), do so now.
- 3) Backup all the data on all of your hard drives.
- 4) Create the installation diskette by following the steps in the installation section of this document.
- 5) Install/upgrade BootIt on your hard drive by following the steps in the installation section of this document.
- 6) Read the "BootIt Lite overview for first time users" section of this document.
- 7) Refer to the Operating System section at the end of this document for notes.

#### **BootIt 2.x and BootIt Lite Compatibility/Information**

Bootlt 2.x and Bootlt Lite are part of the same Bootlt line of products but they are not compatible with each other. In other words, you can use one or the other but not both on the same system.

Both version use the same multi-os directory structure and group editor. If you had previously used Bootlt 2.x multi-os on a partition then Bootlt Lite may not detect the existing operating systems and therefore not create the menu configuration automatically.

If Bootlt 2.x multi-os was active on any of your partitions, you should verify that the CURRENT.GRP file is not on any of the partitions. If it exists it will be a hidden file located in the root directory of the partition(s). You should delete this file so Bootlt Lite will detect the partition as having a new operating system installed.

BootIt Lite will only automatically create menu configurations on detection where a new group is created. This means if BootIt 2.x multios already had several groups created, you may need to run the menu configuration utility and recreate your boot configurations to load the correct groups and boot files.

The Bootlt licensing is for either Bootlt 2.x or Bootlt Lite. One registration allows use of one of the products on one system

#### Installation STEP 1:

Installation of Bootlt Lite is a two step process. First you will create the installation diskette, then you will use that diskette to install Bootlt to your hard drive. Visit www.TeraByteUnlimited.com to make sure you have the latest version of this software as well as for any additional information/help.

Before beginning the installation of Bootlt make sure you have read the previous section titled "Before You begin".

The following instructions will guide you through the first step of the installation process. This step creates the installation diskette.

You will need one formatted diskette that matches the floppy drive A: of the computer that will have BootIt installed. <u>If you are upgrading</u> <u>BootIt Lite then be sure to use that same diskette you used when you</u> <u>last install BootIt Lite</u>. If you are installing on multiple machines, each machine should have its own diskette (and license).

- 1) Extract the BOOTITL.ZIP file to its own directory.
- 2) Change to the directory used in step 1.
- 3) Type SETUP A: (or B: ) then press <enter>
- 4) If you have accepted the terms, hit any key otherwise press Ctrl-C and terminate the batch job.
- 5) Insert the diskette in to the correct diskette drive any key.
- 6) Once the files have finished being copied to the diskette, you're done with step one.

Once you have successfully created the installation diskette you can proceed with step two on the next page.

#### Installation STEP 2:

The following instructions will guide you through the second step of the installation process. This step installs or updates Bootlt Lite to your hard drive.

#### **Boot From the Installation Diskette:**

- Make sure your system boot up sequence is A:/C: and not C:/A:. This information is found in the CMOS setup. You should also disable the boot sector virus protection option. If you leave the virus protection option enabled then it will just get in the way.
- 2) Shut down and <u>turn off</u> your computer.
- 3) Insert the Bootlt installation diskette in your A: drive then turn on your computer.
- 4) If your system boots up as it normally does, see step 1, otherwise BootIt will start to load from the diskette. Eventually the BootIt Lite Diskette Menu will appear.

#### Installing/Updating BootIt Lite to the Hard Drive

- 1) If you are installing BootIt Lite then choose the Install option. If you are updating BootIt Lite then choose the Update option.
- 2) Once the process is complete, press <enter> and continue with the next section.

#### Finishing the installation

When you reboot after installing BootIt Lite, It will begin asking you for the names you want to assign to your partitions and volumes. It will also detect your existing operating system.

When Bootlt asks you for a name of a partition you *must* assign a name to it. You can name it anything you want but to make things easier on yourself, you'll want to keep the names unique and understandable to you.

To help you identify the partition you will be given the partition entry number in the MBR or volume number in an extended partition, size of the partition, the file system type, and the hard drive number.

After naming a partition or volume that is not a FAT type partition, BootIt Lite will ask if you want to add this partition to the Boot Menu. If you want to boot from this partition answer yes. Don't worry if you answer wrong, you can always run the menu configuration utility and add that partition as a boot option.

After naming a FAT type partition/volume BootIt will either continue to the next partition or display a message that it appears that the partition contains a new operating system and asks what you want to do.

If this partition contains a partition you want to boot from you would normally create a boot file and a group for it. For example, If it as windows 95 you could name the boot file WIN95BOOT and create a group named WIN95. The on -screen prompts will step you through the process. All you need to do is enter a unique name for the boot file, create a group with a unique name, and select the operating system type from a menu.

If the partition being detected contains an operating system but is not the startup partition or does not contain an operating system you can disable detection on the partition or ignore this instance of detection. The difference between the two is that disabling detection will keep BootIt from checking the partition for updates until you ether manually create a boot configuration or use an existing boot configuration to boot the partition with a valid boot file or group. Ignoring the detection means BootIt will no longer see the current status of the partition as having a new operating system but will still detect changes to the partition.

If you wanted to skip creation of a boot file at this time you would choose the "None of the above" option. You are then still presented with an option to create a group.

Once all new partitions and volumes are named and operating systems detected you'll arrive at the Bootlt Lite Boot Menu. Simply choose one of the boot configurations you created to boot that operating system.

You should now create a copy of the installation diskette and keep it in a safe place. You <u>will</u> need the installation diskette to recover from any problems or situations that may arise in the future. Use the disk copy feature of one of your operating systems to create a backup. If your installation diskette is ever updated or new one used you should update your backup diskette too.

#### <u>Upgrade History:</u>

Ver 1.00 Initial Release.

#### **BootIt Lite overview for first time users**

To understand Bootlt lets first see how your system boot process normally works then what Bootlt Lite changes.

The first sector of your hard drive is called the Master Boot Record or MBR. The MBR contains two things, a table that defines the partitions on your hard drive (called the partition table) and the code to transfer control to the first sector (called the boot sector) of one of the partitions. The partition table can contain up to four entries. Each entry contains information on where the partition begins and ends as well as a flag to mark the active (or bootable) partition and the type of file system being used in the partition. Here are some of the more common file system identifications:

ID	File System	ID	File System
01	DOS Primary 12-Bit FAT (1-15MB)	12/0Ch	FAT32 - LBA
02	XENIX	14/0Eh	FAT16 - LBA
03	XENIX	15/0Fh	Extended FAT - LBA
04	DOS Primary 16-Bit FAT (16-32MB)	130/82	Linux Swap
		h	
05	DOS Extended FAT	131/83	Linux Native
		h	
06	DOS Primary Large FAT (>32 MB)	219/	Concurrent DOS
		DBh	
07	NTFS/HPFS	223/	BootIt EMBRM
		DFh	
09	Coherent		
10/0A	OS/2 Boot Manager		
h			
11/0B	FAT32		
h			

When control is given to the code in the MBR, it will look at each of the four partitions for the one that is marked active. It will load the boot sector of that partition and transfer control to the boot sector code.

Boot sectors are operating and file system specific. The area for the code in the boot sector has just enough space to look for a certain file, read it in and transfer control. The name of the file is hard coded in the boot sector code. For instance, the boot sector for MS DOS will look for a file called IO.SYS.

There is a special type of partition called an extended partition. This type of partition contains logical partitions called volumes. Each volume is preceded by a partition table in the same format as found in

the MBR. This table contains one entry for a "normal" primary partition and another extended partition entry that "chains" to the next logical volume. The last volume only contains the primary partition information.

BootIt Lite works by replacing the MBR code on your first hard drive. When you boot the system this new MBR code load the rest of the BootIt Lite program. BootIt Lite keeps its main program files on a FAT partition on one of your hard drives.

When Bootlt Lite begins it looks for any new partitions or volumes. If it finds any it asks you to name them. After that Bootlt checks for any potential new operating system that might have been installed and presents you with an option to add the new partition to the Boot Menu or for FAT partitions the option to collect and store the new operating system startup code and files.

The Bootlt Lite multi-os feature allows you to have multiple operating systems in a single FAT partition. This feature is also used when you install an operating system to a partition other than the active partition where the setup program places the startup (or boot) files on. This feature works by storing the key files required to boot up the operating system in a "group" under a directory named BOOTIT.

When you select a Boot Configuration from the Boot Menu, BootIt Lite will copy the "group" of files needed for booting the operating system to the proper place. It also hides/unhides the partitions and volumes specified in the configuration, marks the active boot partition, and loads in the appropriate boot file to initiate booting of the operating system.

#### Navigating Bootlt Lite

Unless there are no menu configurations defined, Bootlt Lite first displays the Boot Menu. From this menu you can Boot one of you defined operating systems, Press F1 for help, F10 for maintenance, or F6 to Boot the Active partition. This section will explain the non obvious features.

If you press escape at the boot menu or assign a count down value Bootlt can quick boo the last configuration. When the Boot Menu first appears after previously selecting a boot configuration, the highlight bar will return to that configuration and begin the count down if one is defined. When the count down time expires or you press enter during the count down, or press escape at anytime, Bootlt Lite will "quick boot" the last configuration. On a quick boot, Bootlt simply reads in the last boot sector booted and transfers control; nothing on the hard drive is updated, including the active partition, hidden status, etc. Therefore if the active partition has changed you should hit the spacebar during the count down to terminate the time out, then press enter to reestablish the active partition.

Under certain circumstances you may want to boot whatever partition is marked active on hard drive 0 without applying one of the defined boot configurations. Use the F6 key for this.

You can press F10 maintain certain features of BootIt Lite as well as run add-in utilities. If you are a registered user and have defined a maintenance password you must enter that password before BootIt Lite will allow you in.

Once at the maintenance menu you can highlight any of the utilities listed and press F1 to get information on the utility highlighted.

You can also press F5 to set the time out value (in seconds) for the Boot Menu. A value of 0 means there will be no count downs and you'll have to select a boot configuration each time you boot.

If you have not registered this is where you input your registration information by pressing F6. If you're already registered, you can press F6 to type in a new message in the message box below the menu. When entering a new message, each line is a field. You can use the Tab key to move between lines and press enter when you have completed updating the message.

The following sections describe the utilities included with BootIt in more detail.

#### **BootIt Boot Menu Configuration**

This utility as its name implies for configuring the Boot Menu. When you run this utility you will be presented with all your boot configurations and their details. BootIt may also automatically apply changes to your configurations to match any changes in the system from when you lasted save the configuration.

The first box titled "Boot Description" contains the name of the boot configurations. This is the name that is displayed on the Boot Menu. The rest of the fields contain the detail information for the highlighted description. You use the arrow keys to move the highlight bar to other descriptions or the tab and shift tab keys to move between the fields.

If you want to add or delete a description you can do so by pressing the insert key or delete key, respectively, while in the Boot Description box. You can also reorder the descriptions by holding down the control key while using the up and down arrow keys.

If a description begins with an asterisk (\*) it will always be highlighted as the next boot configuration to boot when the Boot Menu is displayed.

The drive field contains the drive number from 0 to 7 of the hard drive that contains the partition you want to boot.

The partition field contains the partition to be booted. You can choose from a list of partitions by pressing F4 in that field. If you leave this field blank then the boot configuration is assumed to boot from the floppy drive. Floppy drive boots work by trying to boot from the A: drive first then swapping the floppy drives and trying it again, this time from the B: drive which has been converted to be the A: drive.

The file field contains the boot file for this boot. Press F4 in this field for a list of boot files in the partition.

The Swap option can be used if the boot drive is not 0. If the swap option is checked for a boot configuration then when that configuration is selected the hard drive selected for boot will be swapped with hard drive 0. In other words the system BIOS thinks it is hard drive 0 an that hard drive 0 is the other drive. This allows booting and use of real mode operating systems, such as DOS, from any hard drive.

The sound file field allows you to define a sound that should be played when this configuration is booted. Press F4 for a list of sound files, you can sample the sound by press F4 from the list of sound files. You can also create your own sound files, see the section "creating your own sound files".

The Group field contains the "group" to use when booting this configuration. You can press F4 for a list of groups in the partition.

The MBR HDx fields contain a copy of the partitions defined on your system. With each boot configuration you can configure which

partitions or volumes should be visible or hidden on any hard drive as well as what order the partitions should appear in the list.

To toggle the hidden/visible flag on a partition use the spacebar. To view a list of partitions in an extended partition, press enter then use the spacebar to mark a volume hidden/visible. A tagged partition/volume means its hidden.

**IMPORTANT NOTE!** about hiding volumes and/or having multiple file system volume types with multiple visible FAT primary partitions. <u>All versions of MS DOS through Windows 98 have a major bug</u>! If the last volume in an extended partition is not a FAT type partition and multiple FAT primary partitions exist on the drive, DOS will mount the last volume in the extended partition in place of the next primary partition to mount. If the last volume was a hidden FAT volume, DOS will successfully mount it but will report the size of the drive to be that of the primary partition that should have been mounted. If it was not a hidden FAT type partition then DOS will report that the drive it mapped has errors. Because of this you should arrange your volumes so that a FAT partition is always last in the extended partition chain and that it is always visible when booting or you should hide the entire extended partition.

To change the order of the entries in the MBR you can highlight the partition you want to move, hold down the control key while using the up and down arrows to move it.

If you want to rename a partition or volume you would highlight it and press F7. Renaming of the partition is applied as soon as you press enter.

When all changes have been made you can press F10 to save your changes.

You may have noticed the text in the upper right corner of the window that says AUTOMENU. The text at that location is the name of the menu file that is currently loaded. When you first enter the Boot Configuration Utility the AUTOMENU is always loaded first. The AUTOMENU menu is the menu that is displayed when no "user" menus are defined. To define or load user menus you can press Alt-L.

User menus are menus that require a user to enter a name and password to use. If any user menus are defined then user menus must be used. When a user menu is first created, the settings in the current menu are automatically transferred to the new menu. To define the password for the user menu, use the F6 key with that menu loaded.

When defining user menus you should not use the same descriptions as other menus if the configurations are different. If the configuration is exactly the same as all other configurations with that name then it's okay. If you are working on a user menu and want to return to the AUTOMENU, you would hit Alt-L to display the user menus defined then press the HOME key.

When the AUTOMENU is loaded, you can use the F6 key to define the maintenance password. No password is ever associated with the AUTOMENU.

#### Capture MBR

In rare cases you may have to use a MBR to boot an operating system. If that is the case you can use this utility to capture the MBR. This utility is also located on the Bootlt Lite Diskette.

All you need to do is select the hard drive you want to capture and give the file a name. You then use this file as the boot file in a boot configuration. All MBR boot files begin with the small box character.

If you run the utility from the diskette you'll need to copy the file to the \BOOTITL directory on your hard drive. To do so you can use a question mark (?) in place of the box character on the copy command.

For example: copy a:?mbrboot c:\bootitl

#### <u>Group Editor</u>

This utility is used to group a set of files together. For example a DOS group would contain (at minimum) IO.SYS, MSDOS.SYS, COMMAND.COM, AUTOEXEC.BAT, CONFIG.SYS.

To use this utility you select the hard drive that contains the FAT partition you want. You then select the FAT partition.

Once in the partition you are either presented with the existing group names or the option to add a group.

To add a group when there are existing groups press the insert key. To delete an existing group, highlight it and press the delete key. Two work on a group, highlight it and press enter. To rename a group, highlight it and press enter.

When you add a new group you are asked for the group name. This name will become the directory under \BOOTIT in the partition. After you enter the name you are prompted for the operating system. You can choose the appropriate OS from the list or choose 0 to enter the file group information yourself. Note, you can select an OS from the list and still go back and add or change additional things. If you choose the option from the menu you are prompted for a description. This is a description for the group.

If you choose to enter the file names yourself, or you are editing an existing group, you are presented with a list of file names currently in the group. If your creating an entry there won't be any. You can also change the description of the group here.

To add a new file to the list, go to the list and press insert. To delete one, highlight it and press delete.

When adding a file to the list a dialog box is displayed where you enter the position code, update type, path, file name, and extension.

The position code is only used in certain cases and only applies to files in the root directory. If a number other than 0 is in this field then it means that this file must be located at that location in the root directory. For example, DOS requires IO.SYS and MSDOS.SYS to be the first two entries in the directory. So you would assign 1 to IO.SYS and 2 to MSDOS.SYS.

The update code can be M or A. If it is an 'A' then this file will be automatically updated in the group when the file changes. In other words, if AUTOEXEC.BAT had the update code A and it was changed, the changes would be automatically applied to the copy of AUTOEXEC.BAT in the group. If it was an 'M' you would be prompted if you wanted to apply the changes to the group file or to leave the group file as it is (the new changes are lost). You don't want the program files or important files to be an update type 'A'.

The path is the path to the file and the file name and extension are obvious.

When you press F10 to save the changes the current files in the "target" location are copied to the group. If the file already exists, you are given the option to keep or replace it. Be sure you don't copy over some other operating systems files. In other words, if you last booted with Win98 and your working on Win95 you don't want to replace the files you have in your Win95 group because it would be copying over the Win98 files.

#### Setup Colors and Background

This option is pretty obvious. You can pick you own colors as well as the desktop character.

#### Creating your own sound files

All you need to create your own sound files is an ASCII text editor. Simply create a file with an extension of SND and place it in the \ BOOTITL directory. You can use the PLAY.EXE utility in the directory to sample your creation. If you create a sound file named STARTUP.SND then that sound file will be played when BootIt is started at boot.

The format of the sound file is as follows; note: capitalization/spacing is not important and the x in the examples represents a number.

**cycles=x** (optional-must be first) - number of times to cycle the entire routine.

Fx - Frequency to play (in hertz)

**FRx**|**XSxLx** - Frequency range to play. First x is starting frequency, x after '|' is ending frequency. S is optional and is the step frequency rate (default=1). L is also optional, it is the latency delay in milliseconds between frequency step. (default=0)

**Nx** -Delay in milliseconds. (1000 milliseconds = 1 second)

**N** - No sound. Turns sound off.

#### <u>The Diskette Menu</u>

The diskette menu gives you a convenient way to install, update, deactivate and reactivate Bootlt Lite. You can also capture a MBR using the Capture MBR utility discussed above.

If Bootlt is no longer displayed at boot you may need to reactive Bootlt Lite. Simply insert your installation diskette and boot from it. Choose the reactivate option.

If want to remove BootIt as the boot manager, for example, you think BootIt is conflicting with the booting of one of your operating systems you can boot from the installation diskette and choose the deactivate option. To later reactivate BootIt, boot with the installation diskette and choose the reactivate option.

#### **Operating System Notes**

#### General Information

When you install most operating systems it will want to install its boot up files in the current active primary partition even if the bulk of the system is going to another partition. Not all operating systems do this and some give you the option to select where each part of the system should go. Many also come with their own partitioning software that is used during installation.

Some operating systems come with special loader programs which can be installed in the MBR or on the partition. You should always choose to install it in the partition.

If you are using one of the MS operating systems it will always install its boot up files in the current active partition on hard drive 0 (or what it thinks is hard drive 0). To install a MS OS in its own primary partition on hard drive 0 you need to make that partition active at startup. You can do that either by setting the partition active and rebooting the system by the installation boot diskette. You don't want to just set the partition active then install if you have other primary partitions that you booted from. If you were to do this, the installation would see the installation drive as something other than C:, then when this partition was booted (becoming C: ) all the drive pointers (in the configuration files, etc) would be pointing to the wrong drive.

Normmaly all you need to do is to choose the destination of where you want to install the operating system. BootIt will then detect the new operating system boot and system files that have been placed in the active partition. BootIt may also detect the drive that has the bulk of the new OS installed on it as having a new operating system. While this is true, you would ignore that detection because the files BootIt wants are on the other "startup" drive.

When you install other operating systems that use their own file system, you need to be careful of where a new file system may reside in an extended partition. MS DOS operating systems through Win98, have a bug where if the last volume in the extended partition is not a reconized FAT type partition and multiple visible FAT primary partitions exist, it will mount the last volume as a FAT volume in place of the next primary partition. But it will think the size of the partition is that of the primary partition.

#### <u>Windows 95/98</u>

Files and file positions required for boot (not including any compression drivers):

Position	File Name	
0	IO.SYS	
0	MSDOS.SYS	
0	COMMAND.COM	
0	AUTOEXEC.BAT	
0	CONFIG.SYS	

If your installation of Windows 95 or Windows 98 is missing the CONFIG.SYS or AUTOEXEC.BAT file it is a good idea to create a blank one. If you don't an OS might get installed which does and then it will be applied to your existing installation.

You can install Windows 95 or Windows 98 on any hard drive. MS installs its boot up files in the active primary partition on hard drive 0. BootIt allows you to also install Win98 or Win95 completely on any hard drive. If you choose to do it that way then you must hide all primary partitions in the drives preceding the drive to contain the installation.

#### Adding Windows 98 after Windows 95 installed:

If you try to setup Win98 while Win95 is running you'll only be able to upgrade Win95. There are a few ways around this. One way is to boot with a Win95 Installation Boot Diskette, just make sure the last active partition was where you want the boot files to go. Another way is to shut down Win95 to DOS mode, you'll have to be sure you have it configured to access your CDROM when in this mode.

If you want Win98 entirely in its own partition then make it the active partition and reboot the computer using a Boot Diskette with your CDROM drives on it, such as the Win95 Installation Boot Diskette.

If you want to make an additional copy of the Win95 partition you can create the partition and format it. Then copy the Win95 system to the new partition. You can use the xcopy command to do this. You must be in the GUI mode. Run the MS DOS Command prompt and using xcopy with the following switches. /E /C /H /R /K /Y. Then from the C:\ directory, use the SYS command to SYS the new partition. You can delete should now delete the CURRENT.GRP file and the \BOOTIT directory from the new partition. You can use the DELTREE command for both. The CURRENT.GRP file is hidden in the root directory so you can just type DELTREE CURRENT.GRP from the root. You then reboot and add the new partition as a boot option. Now you can boot from either one and upgrade it to Win98.

#### Converting from the Win95 DOS/Win95 dual boot

If you want to convert your Windows 95, DOS/Win95 dual boot you can do the following.

First make sure you have your boot configuration for Win95 set and working. Next boot with that configuration but dual boot in to DOS. You can do this by press F8 at the Starting Windows 95 ... prompt. Once DOS boots get a blank diskette and either format it with FORMAT /S or transfer the system to it by using the SYS command. For example SYS A:. Once complete, copy the SYS command to the diskette. Change to the diskette and type in SYS C:. Reboot your computer and add the new DOS configuration to the Boot Menu.

#### Converting from WinNT dual boot.

To convert this one over you do the same steps as the explained in the converting from the Win95 DOS/Win95 dual boot only you boot with NT and select Windows. You then press F8 at the Starting Windows 95 ... prompt and choose to startup in the command prompt only.

Windows 95 and 98 can boot themselves from any place on your hard drive. There are no limitations.

#### <u>Windows NT</u>

Files and file positions required for boot:

Position	File Name
0	NTLDR
0	BOOT.INI
0	NTDETECT.COM
0	NTBOOTDD.SYS

The NTBOOTDD.SYS is only used on SCSI systems. You can remove it from the group if you don't need it.

Windows NT as all MS operating systems install its boot up files in the active primary partition on hard drive 0. The bulk of the system can be installed on any drive.

Windows NT will give you the option to either create a new installation or upgrade. You'll normally select new installation.

If you want to have NT 4.x and later in he same partition as Windows 95 or Windows 98 you should be aware that the accessories and program files include with each operating system installs them to the "\ PROGRAM FILES" folder. This means they could overwrite each others tools or programs. It's usually better to install them in different partitions or volumes. Sharing the boot partition with other operating systems is not a problem because BootIt takes care of it.

Windows NT versions prior to version 5 does not support FAT32. They can't be booted from above 2GB either.

You can change the Windows NT OS Loader message by changing the setting in the control panel. Choose the system option then change the startup options.

#### PCDOS/MSDOS

Files and file positions required for boot (not including any compression drivers):

MS DOS		
Position	File Name	
1	IO.SYS	
2	MSDOS.SYS	
0	COMMAND.COM	
0	AUTOEXEC.BAT	
0	CONFIG.SYS	

PC DOS		
Position	File Name	
1	IBMBIO.COM	
2	IBMDOS.COM	
0	COMMAND.COM	
0	AUTOEXEC.BAT	
0	CONFIG.SYS	

You can add DOS to a partition by using the SYS command from you DOS boot diskette. The SYS command must already be on the diskette.

Normally DOS can only be booted from under 2GB. BootIt will detect and give you the option to fix this limitation.

#### <u>Linux</u>

When installing be sure to install LILO in the superblock or root directory of the partition. Do not install it in the MBR.

#### <u>OS/2</u>

Files and file positions required for boot:

Position	File Name	
0	AUTOEXEC.BAT	
0	CONFIG.SYS	

Actually the system files for OS/2 are OS2KRNL, OS2LDR, OS2LDR.MSG, OS2RAS, OS2VER, OS2BOOT, and WP ROOT.SF. If you were going to install more than one version of OS/2 in the same partition then you would need to add these files to the group. Also, AUTOEXEC.BAT is not needed, but it would be a good idea to have at least a blank one.

OS/2 may refuse to install itself in the same partition as Windows NT. If it does you can (yourself) delete or rename the boot files listed in the Windows NT section, you may also have to rename the WINNT directory to something else. Don't let OS/2 delete the NT partition. Doing so will lose all data on the partition.

OS/2 will only let itself be installed to a volume or alternate hard drive if boot manger is installed. After it is installed you can boot OS/2 with boot manger or BootIt.

You need to make sure that the OS/2 drive letter does not change after installation otherwise OS/2 will refuse to boot you can use partition and volume hiding to correct this.

#### **Bootlt Order Form**

Text version in file REGISTER.FRM

Remit To:

#### TeraByte Unlimited 258 N. Saturmino Dr. Palm Springs, CA 92262

Registration Name:	Date:		
Mailing Address:	Phone #:		
	Phone #:		
	Fax #:		
E-Mail Address:	PC Brand/CPU Type:		
Shipping Address:	Hard Drive Type: IDE EIDE SCSI		
	Primary OS:		
	Secondary OS:		
How did you learn about Bootlt:	Floppy Drive Size(s): 3.5" 5.25"		

Description	Unit Price	Qty+ +	Extended Price
Bootlt 2.x/Bootlt Lite Registration	\$39.95		\$
BootIt Programmer API Documentation	\$9.95	1	\$
Sub-Total			\$
Shipping and Handling Fees for orders not sent via e-mail add \$9.95			\$
California Residents add applicable sales tax			\$
TOTAL CHECK OR MONEY ORDER ENCLOSED*			\$

# \*Check or Money Order must be drawn on a U.S. bank in U.S. Dollars.

++ Site-License formula ^: (qty/log(qty))\*39.95

^ Educational organizations use log base 5 all other organizations use log base 10.