

1	Installation and brief overview	1
1.1	System requirements	1
1.2	Installation of BootManager	2
1.2.1	Windows Installation of BootManager	2
1.2.2	DOS Installation of BootManager	3
1.3	After the Installation	3
1.4	BootManager modules and functions	3
1.5	Partition Manager	3
2	The BootManager configuration program	4
2.1	Program windows and command push buttons	4
2.2	Pull down menu <BootManager>	5
2.2.1	Install/Deinstall BootManager in MBR	5
2.2.2	Install new Operating system	5
2.2.3	Save changes	5
2.2.4	Options - BootManager Parameters	6
2.3	Pull down menu <Boot menu>	7
2.3.1	Wizard - create a new entry with help of the wizard	7
2.3.2	Create a new entry manually	8
2.3.3	Rename, edit/change the name of a boot menu entry	8
2.3.4	Remove an entry from the boot menu	8
2.3.5	Set password to start an OS	8
2.3.6	Activate/Deactivate a boot menu entry	8
2.3.7	Properties	9
2.4	Pull down menu <View>	9
3	Reference	10
3.1	Command Reference to important tasks	10
3.2	Bootable disks of BootManager and Partition Manager	10
3.3	Linux and Linux Loader (LILO)	10

1 Installation and brief overview

The new advanced BootManager from Paragon has been specifically developed to add additional OS's to an already existing Windows OS. These additional OS's may be any other version of Windows as well as most other OS's like Linux. To reach this goal we added a special version of our Partition Manager, which enables the program to resize an existing bootable Windows partition and create new additional primary partitions for new OS's.

The most significant functions

- Easy and comfortable installation in any Windows OS,
- Easy and comfortable removing and reinserting of the BootManager startup in the MBR,
- Resizing of existing partition with data to create space for new partitions,
- Creating and formatting new partitions for new OS's,
- Booting of OS's from primary partitions and logical drives on all visible hard disk,
- Booting the same OS with different visibility of partitions,
- Direct booting of the Linux kernel (bypassing LILO and its limitations).

Beside these functions there are other features like the password protected booting of any OS, auto boot options (automatic start of a default OS) and the hiding of any other partition to the booting OS. There is also a DOS version of the program to enable the work with empty (raw) hard disks and PCs without any OS.

Depending on the configuration during setup the BootManager will show during each PC startup a boot menu with OS's to select from, or it will boot directly a default OS.

The manual for the Partition Manager is part of the Partition Manager program.

1.1 System requirements

Processor : 386 and higher
RAM: 4 Mb (for DOS), 64 Mb (for Windows)
Free space on hard disk: 4 MB

Floppy drive
CD-ROM drive
Mouse
Operating System, DOS or any Windows

Following OS's are supported:

Windows 95
Windows 98
Windows ME
Windows NT 4.0
Windows 2000
Windows XP
MSDOS
PCDOS
PTS-DOS (Paragon DOS)
General support for all other DOS versions.
Linux
General support for Unix
OS/2

1.2 Installation of BootManager

The advanced BootManager consists of following modules:

- OS loader
 - > Resides on cylinder 0 (track 0)
- BootManager Setup program for DOS
- BootManager Setup program for Windows
- Diskette Build Wizard
 - > Creates bootable DOS disks with BootManager and Partition Manager
- Partition Manager Easy for Windows
- Partition Manager Easy for DOS

The installation can be done under Windows 95/98/ME/2000/NT/XP as well as under DOS. With bootable DOS disks you can also prepare hard disks and PCs without any OS to host multiple OS's.

Some parts of the BootManager are installed on Cylinder 0. Among them is the part that replaces the default code in the MBR (Master Boot Record in sector 1). This is necessary to get control of the booting process and to be able to display a boot menu. If there are several hard disks you may install BootManager on any of these hard disks. This is useful if you plan to boot from different hard disks by switching the boot drive in your PC's BIOS (change the boot sequence) or in your SCSI control program (boot device).

1.2.1 Windows Installation of BootManager

1. Start SETUP.EXE
 - This starts a comfortable dialog installation through Install Shield.
2. During the installation process Disk Build Wizard will be called; Please create a bootable disk with BootManager as well as one disk with Partition Manager.
3. After the installation you will be asked if you want to replace the default MBR with the BootManager start routine. Only if you replace the default MBR code with the BootManager start routine, BootManager will be started after the next booting. See chapter 2.2.1 "Installation/Deinstallation".

1.2.2 DOS Installation of BootManager

We recommend the creation of bootable DOS disks by using the Diskette Build Wizard on a Windows-PC. If this is not possible you have to create the disks manually:

1. Insert a formatted but otherwise empty disk in to drive A:
2. Start MAKEFLOPPY.BAT in directory \BMDOS. This batch program copies all required files to the disk and makes the disk bootable (creates boot record). This disk is also required in emergency cases and for the Deinstallation of BootManager.

Boot from the created disk and the DOS version of BootManager will install on the hard disk. You may call the DOS version of the configuration program BMSETUP.EXE in the directory \BMDOS. Make sure that the Mouse driver is loaded to be able to run the program.

1.3 After the Installation

BootManager analyses all primary and logical partitions on all hard disks for any installed OS. All OS's found will be inserted in an internal file and displayed in the boot menu in following way:

- a) OS name
- b) Partition
- c) File system
- d) Partition name (volume label) if available
- e) Size of the partition

In some cases BootManager may detect partitions, which do not host a bootable OS, for example primary NTFS-Partitions without Windows NT loader. Such entries may be removed from the boot menu through the <Deactivate> command. See chapter 2.1 "Windows and Button commands" and 2.3.6 "Activate/deactivate entries in the boot menu".

1.4 BootManager modules and functions

BootManager consists of two modules

Module OS loader and boot menu display

This module is automatically called during each PC start-up. This module can never be started manually but its call may be disabled (and again enabled) at any time. See chapter 2.2.1 "Installation/Deinstallation"

Module configuration of BootManager and boot menu entries

This module may be called manually at any time. It is a menu option in the BootManager Windows program group and it enables some general settings for the BootManager itself as well as the configuration of individual entries in the boot menu.

General settings

- Install/Deinstall the BootManager in the MBR
 - Administrator Password
 - Display/Do not display boot menu
 - Auto boot of an OS
 - Install a new OS
- General boot options

Cnfiguration/edititing single boot menu entries

- Create new entry
- Edit/Rename entries
- Delete entry
 - Activate/deactivate an entry
 - Set password to start an OS

1.5 Partition Manager

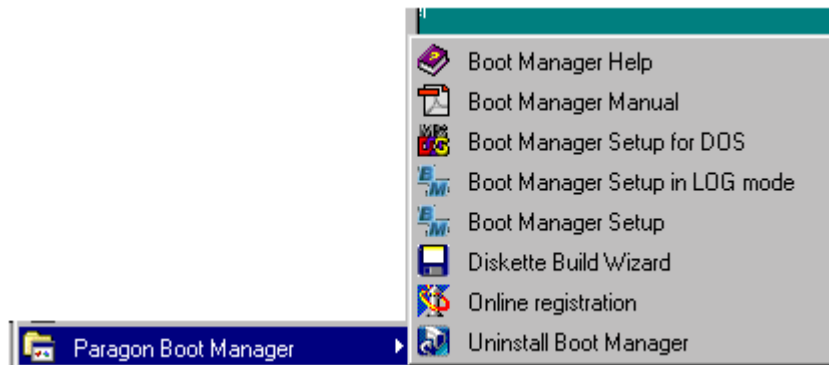
The manual for the Partition Manager is part of the Partition Manager program.

2 The BootManager configuration program

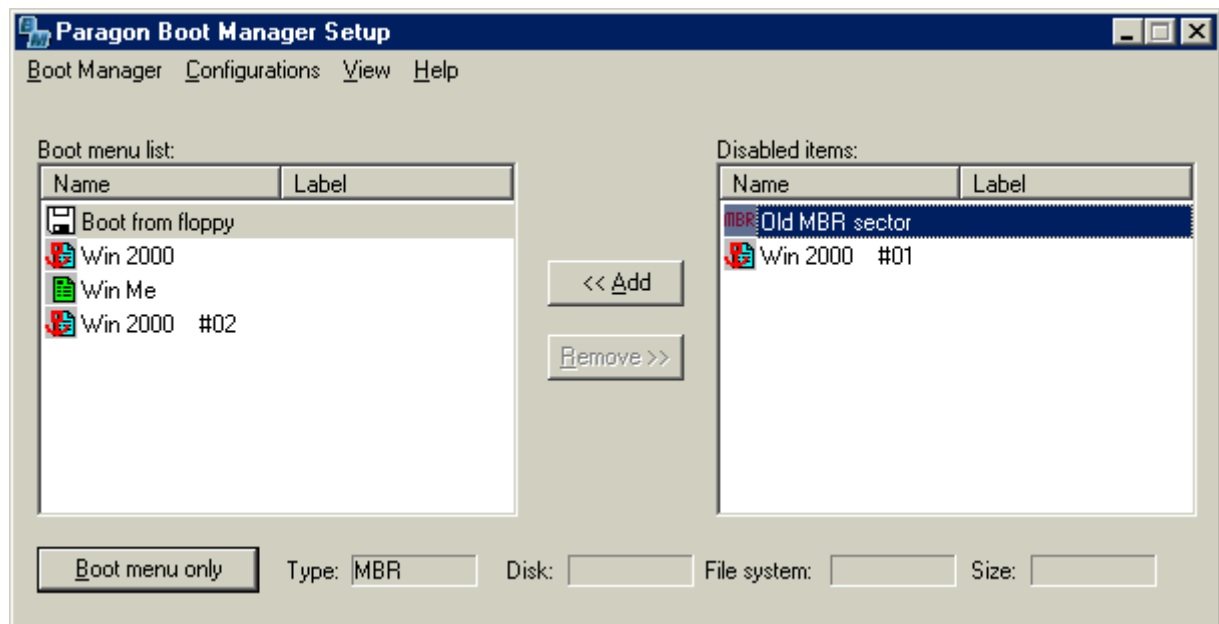
The configuration program let you change some of the programs general parameters as well as the entries in the boot menu and how to select and start up an OS. The configuration features are for the DOS and for the windows version available.

The DOS configuration program may be called from the BMDOS directory (the BootManager home directory) or by booting from the bootable DOS diskette with BootManager.

The windows version of the configuration program is part of the BootManager program group and it may be called in log mode (to protocol all changes) or in non-log mode.



The main window of the BootManager configuration program (Windows Version):



2.1 Program windows and command push buttons

Window “Boot menu list”

This window on the left side shows all entries visible in the boot menu displayed at start up.

Window „Disabled items“

This windows shows all deactivated entries which will not appear in the boot menu.

Selecting an entry in the boot menu.

The cursor may be on any entry in the left or right window and this highlighted entry is the active entry. Depending on the activated entry (in the right or left window) some commands are active or deactivated. Below the window(s) are further information about the active entry.

Command push button „Boot menu only“ / „Show disabled items“

This is a flip-flop push button. It shows the caption "Boot menu only" if both windows are visible and "Show disabled items" if the left window "Boot menu list" is visible only.

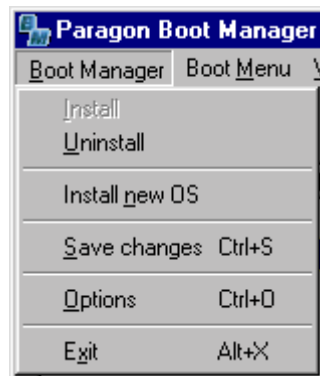
Command push button „<<Add“

This command adds entries from the window "Disabled items" to the window "Boot menu list". The goal of this command is to return deactivated entries back to the boot menu. The command is only active if the cursor is placed on an entry in the right window "Disabled items"

Command push button "Remove>>"

This command removes an entry from the left window "Boot menu list" and places this entry in the window of "Disabled items". The command is only active if the cursor is placed on an entry in the left window "Boot menu list"

2.2 Pull down menu <BootManager>



Important note: All changes done with the following options will only then be permanent when you select "Save Changes" from the Pull down menu in the pull down menu BootManager program. This must be done before you exit the program. See also chapter " 2.2.3 Save Changes".

2.2.1 Install/Deinstall BootManager in MBR

Installing writes the start-up program of BootManager into the MBR. This is mandatory to activate the BootManager during the start-up of the PC. This option is only active if the start-up program has not yet been written into the MBR.

Deinstalling removes the BootManager start-up program from the MBR. This option is only active when the startup program has already been written into the MBR. When removing the BootManager startup from the MBR you also have the option to delete all entries

These two menu options give you the comfortable possibility to activate and deactivate BootManager at any time without uninstalling and reinstalling the software completely.

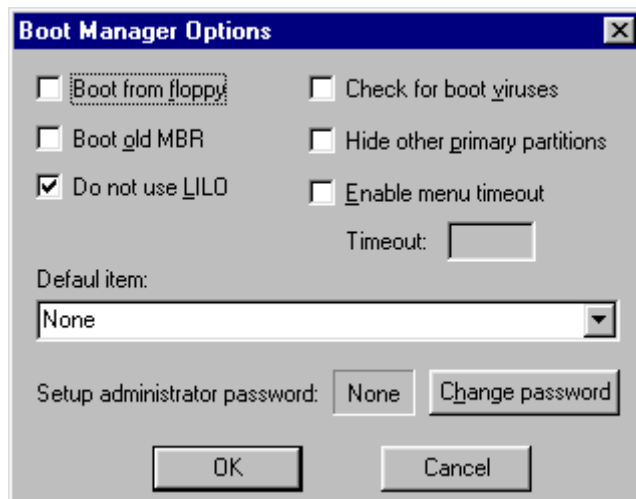
2.2.2 Install new Operating system

This option prepares the installation for another OS. Right now the installation of a new OS can be done from a disk or a CD-ROM. Basically this routine leads till the point where the installation of the OS from a CD or disk begins. The preparation is limited to the selection of the to be installed OS and the target partition (and drive) which is then set visible to the installing routines of the new OS.

2.2.3 Save changes

With this option you can permanently save all new changes. This function is only active when changes were made. It is also called automatically when you exit the program and with changes pending.

2.2.4 Options - BootManager Parameters



Checkbox “Boot from floppy disk” switches the ability to boot from a floppy disk on and off. If checked, booting from a floppy disk is possible if unchecked booting from a floppy disk (drive A:/B) is blocked.

Note: To use this option correctly you are required to check the boot sequence settings in the PC’s BIOS. Furthermore you have to be aware that the BIOS settings (as well as the BootManager settings) may be changed by anyone if you do not use password protection for BIOS and BootManager settings.

Checkbox “Boot old MBR”

If this checkbox is empty, the boot menu will not show the option „Boot from old MBR“.

Checkbox “Do not use LILO”; If this Checkbox is unchecked BootManager will show the LiLo as an additional option to boot Linux. In this case you may boot Linux directly or through LiLo.

Checkbox “Check for boot virus ”; BootManager may check the MBR for a boot virus during each boot up. In some cases disk managers like Ontrack Disk Manager are recognized as a boot virus, in this case uncheck this box.

Checkbox “Hide other primary partitions”; if this checkbox is checked all other primary partitions will be invisible to the booting OS; The booting OS will see its own partition only.

Checkbox „ Enable menu timeout“

If this option is unchecked the boot menu will be displayed till you make a selection. If checked, the next field “Timeout” is activated. The required entry for this field will be the waiting time in seconds before the booting of the default OS takes place.

You may disable the boot menu completely if you do not want to make an OS selection each time your PC boots. In this case the PC boots either the default OS or, if not defined, the OS from the last session.

To bypass the display of the boot menu:

- a) Check Checkbox “Enable menu timeout”
- b) Set “waiting time to auto boot” to 0.

Define the default OS to boot from, otherwise the system will boot the OS from the last session.

To select again an OS from the boot menu, press the left ALT key during the PC startup procedure. This will display the boot menu immediately. To show the boot menu permanently you have to uncheck the Checkbox „ Enable menu timeout“

Entry field „timeout “

The entry in this field defines the waiting time in seconds for displaying the boot menu and waiting for a user selection. The field is only activated if the option „Enable menu timeout“ is checked. If you enter 0 seconds , the Bootmanager will not display a menu at all, but boots immediately the default OS.

Entry field „Default item“

The entry in this field will be used to define the default OS to boot from after the timeout, or if bypassing the boot menu completely. In case that there is no default entry defined, the program will choose the OS from the last session and if that OS is not any more available, it will boot the OS behind the 1st entry in the boot menu.

To select an entry (OS) as default entry (default boot system):

1. Select the OS in the list default entry
2. Confirm the selection with OK.

Administrator password

We recommend installing an administrator password during or after the first configuration. This is necessary to protect your configuration from being overwritten accidentally or on purpose.

1. Press the button “Change password” which opens the Window “New administrator password”;
This administrator password is at the begin empty
(If an old password exists enter it in the field “Old password”)
2. Enter the new password in the field “New password” and confirm it.
3. Terminate your entries with the OK button.

Note: If you want to eliminate the password-protected access, go through the above steps and enter spaces (Space key) in the field "new password".

2.3 Pull down menu <Boot menu>

The way OS's are called as well as their names and some parameters may be changed. The changes (editing) of these parameters can be done either through individual menu options or through <properties>.



Important note: All changes done with the following options will only then be permanent when you select “Save Changes” in the Pull down menu <BootManager>. This must be done before you exit the program. See also chapter “ 2.2.3 Save Changes”.

2.3.1 Wizard - create a new entry with help of the wizard

This version of BootManager offers you the option to add further entries (of the same OS) in to the boot menu list. Any of these additional entries may have different settings concerning the visibility of other partitions. Any user on a PC may therefore have his own entry in the boot menu and his own visible partition(s).

This wizard takes you step by step through the creation of new entries in the Bootmenu. This newly created entries must be based on an already existing entry for a real OS found by BootManager. For more information see Chapter „2.3.2 Creating – Create a new entry manually”.

2.3.2 Create a new entry manually

Identical goal as in chapter 2.3.1.

To add an entry without help of the wizard, follow these steps:

1. Choose (highlight) the OS that you will use to create a new entry on.
2. Select “Create”, this will open a dialog window in which you can change the default name and create a password for calling this entry
3. Press OK will show a window with all primary partitions set the visibility for any of this partitions with the hide/unhide check boxes
4. Press the “finish” button will create the new entry.

The new entry is now in the boot menu list visible and you may select it during the next PC startup.

2.3.3 Rename, edit/change the name of a boot menu entry

Every boot menu entry can be changed later on. You can choose any name like “Windows 98 Bob”, “Windows 98 Tamara” or “Windows 98 graphic studio” etc. This are only changes to the name of an entry as it will be shown in the boot menu.

2.3.4 Remove an entry from the boot menu

You can remove (delete) all entries, which have been added in 2.3.1 and 2.3.2; But only for these entries the command is activated. All other entries, which have been found and added by BootManager, cannot be deleted because they are the original entries to an existing OS found by BootManager. These original entries may only be deactivated (and activated again) at any given time. See chapter „2.1 Windows and command push buttons“ and "2.3.6 Activate/Deactivate Boot menu entries”

2.3.5 Set password to start an OS

By default all OS’s may be called without entering a password. To change this default settings do following steps:

1. Select the option password
This will show you a “boot menu list”
2. Mark the OS in the list which you want to protect by a password
3. Press the button “Change”
4. If there is already a password you are requested to enter first this old password
5. Enter the new password and confirm it
6. Terminate your entries by pressing the OK button

Note: If you want to eliminate the password-protected access to an OS, go through the above steps and enter spaces (Space key) in the field „new password”.

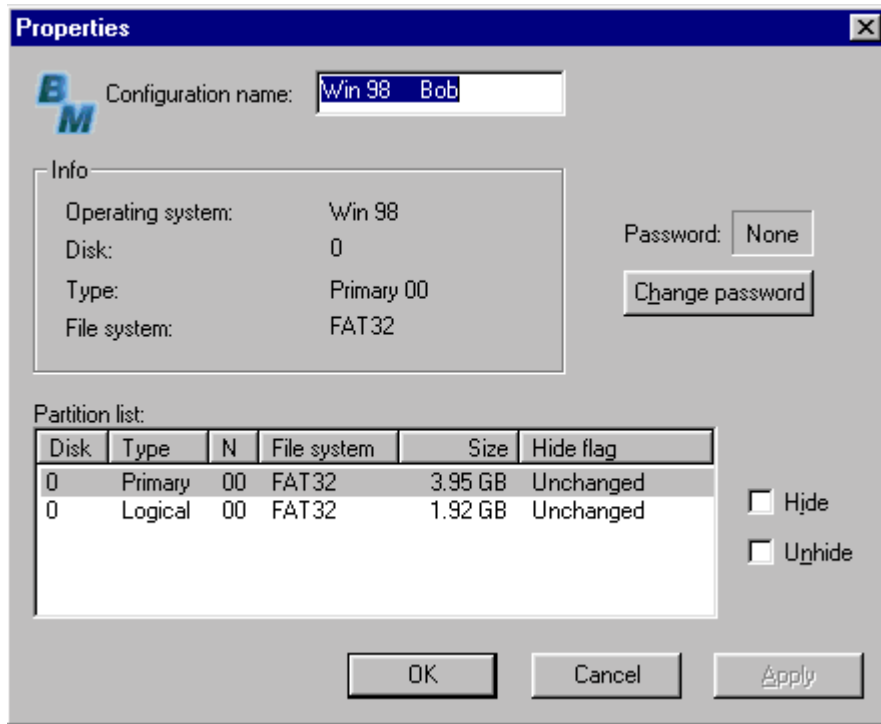
Notice:

From now on the Password will be needed to start this password protected OS. This password can be changed or deleted by anyone, as long as you did not protect the access to the Bootmanager settings by an administrator password. See also chapter “2.2.4 Options – BootManager Settings – Administrator Password”.

2.3.6 Activate/Deactivate a boot menu entry

This menu options work the same way as the Command push button “<<Add“ and “Remove>>” , they add or remove entries from the window „Boot menu list”. See also chapter “ 2.1 Windows and command push buttons <<Add / Remove>>“

2.3.7 Properties



This window shows the settings for the selected (highlighted) boot menu entry. Following changes can be done in this dialog window:

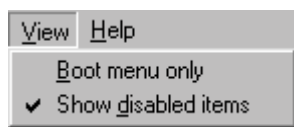
- a) Changing or setting a password.
- b) Changing the visibility of partitions.

For more information on changing passwords see chapter “2.3.5 Set password to start an OS“

The hiding of partitions happens in the following way:

Select in “Partition List“ the partition that you want to hide and click on the box “Hide“ on the right side of the window. If you want to reverse a hiding click on the check box “Unhide“.

2.4 Pull down menu <View>



This pull down menu gives you the option to display either the window „boot menu list“ only, if the option “boot menu only” is checked. If the option “show disabled items” is checked both windows will be displayed. See also chapter 2.1 Windows and command push buttons „Boot menu only“ / „Show disabled items“

3 Reference

3.1 Command Reference to important tasks

- Start the BootManager Configuration program
 - Choose BootManager setup with or without log in the BootManager program group.

All following tasks are available in the BootManager Configuration program.

- Deactivate BootManager (remove start code from MBR , BootManager will not be activated and no boot menu will no be displayed during PC startup)
 - Chapter 2.2.1 Install/Deinstall BootManager in MBR
- Activate BootManager (reinsert start code of BootManager in MBR, BootManager will be started and the boot menu will be displayed during PC startup)
 - Chapter 2.2.1 Install/Deinstall BootManager in MBR
- Remove/insert entries from boot menu
 - Chapter 2.1 Windows and command push buttons , button „Remove>>“
 - Chapter 2.3.6 Activate/Deactivate entries in boot menu
- Set administrator password
 - Chapter 2.2.4 Option, administrator password
- Automatic booting of an OS, bypassing the display of boot menu and any waiting time
 - Chapter 2.2.4 Option, enable Bootmenu time out
 - Chapter 2.2.4 Option, entry field timeout.
 - Chapter 2.2.4 Option, entry field „Default item“
- Create a 2nd entry for an existing OS
 - Chapter 2.3.1 Wizard and 2.3.2 Add new entry in boot menu

3.2 Bootable disks of BootManager and Partition Manager

During the installation (under Windows) you are asked to create bootable disks of BootManager and Partition Manager. These disks are very important in emergency cases like cases in which the MBR is damaged (no boot menu visible) or a selected OS is not booting any more.

The boot disk with BootManager contains an elementary DOS and the DOS version of BootManager. Booting from this diskette gives you again access to the MBR and to the boot menu and lets you replace a defect MBR with a new MBR or with the old MBR before the installation of BootManager.

The boot disk with Partition Manager contains an elementary DOS and the DOS-Version of Partition Manager. With this version you can partition hard disks on a PC without any OS or change the booting (window) partition on a PC.

3.3 Linux and Linux Loader (LILO)

Bootmanager allows the direct booting of a Linux, bypassing LiLo (Linux loader) completely. BootManager recognizes most Linux versions and is able to load them directly. In case that the booting of Linux fails (no Linux default installation found) you may reactivate LiLo if this loader was used before

There are 2 options to reactivate LiLo:

LILO was installed in the MBR before the installation of BootManager. In this case you may use the Backup of the old MBR, which was automatically created during the installation of BootManager. This backup is shown in the boot menu as „Boot from old MBR“ if the checkbox “Boot from floppy disk” in the pull down menu BootManager→options“ is unchecked.

LILO was installed in the Linux partition.

In this case the BootManager recognizes the Linux Kernel as well as LiLo. As a default, BootManager

suppresses the display of LiLo in the boot menu. You may change this default setting in the pull down menu Parameters→Option. Uncheck the option box „Do not display LILO“.
To activate the changes you have to reboot the system.