XBoot

The Boot Manager

Atari ST/TT

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1. Introduction

You all know the problem: In the course of time the boot partition of your hard drive gathers an increasing number of AUTO folder programs and accessories and, pretty soon, you lose all control. So, it would be nice if you could only load the AUTO folder programs and accessories pertaining to each particular session.

And that's exactly where XBoot comes to the rescue. Running as the first program in the AUTO folder of the boot partition, it offers the option of creating a unique configuration for each AUTO folder program or accessory. But that's only one of XBoot's numerous features...

A distinct drawback to running programs from the AUTO folder is that they cannot use any GEM functions (AES), in other words: there is no graphic user interface and no mouse. Because of this such programs are, in most cases, very cumbersome to use, in particular when they contain numerous options.

XBoot is different. It's the first program for the ST that provides a real GEM-like interface within the AUTO folder. And it's fully mouse controlled. You work with a real mouse pointer as if you were in a regular GEM program. In addition, all functions can also be invoked from the keyboard.

Besides being easy to use, the program is also very efficient and, in addition to standard features such as activating/deactivating of AUTO programs and accessories, it also offers many others.

Here's a short overview of XBoot features:

- Fully controlled with either mouse or keyboard.
- Runs in monochrome (640 x 400 pixels) and in colour (640 x 200 pixels), on large screen monitors and with hardware expansions like Overscan. On the Atari TT it also runs in the medium resolution (640 x 480 pixels, 16 colours) and in the high resolution mode (1280 x 960, monochrome).
- Often used settings can be saved as a SET.
- The execution order of AUTO folder programs and accessories can be changed at will.
- The programs and accessories can be listed as sorted or unsorted.
- Setting of system date and time.
- Even the computers without a battery backed-up clock will maintain the correct time and date after a reset.
- DESKTOP.INF options (Atari TT/Mega STE: NEWDESK.INF), such as key-click, keyboard-repeat, RS-232 parameters etc., can be set at will.
- XBoot can be fully configured using a separate program.
- Flexible installation of any Info file, i.e. ASSIGN.SYS, DESKTOP.INF etc. can be changed on the fly.
- Optional scrap folder for saving of files in case of an unsuccessful installation.
- Autostart of any GEM program under all TOS versions (1.00 and 1.02 as well).
- A very comfortable, custom written, file selector.

2. Installation

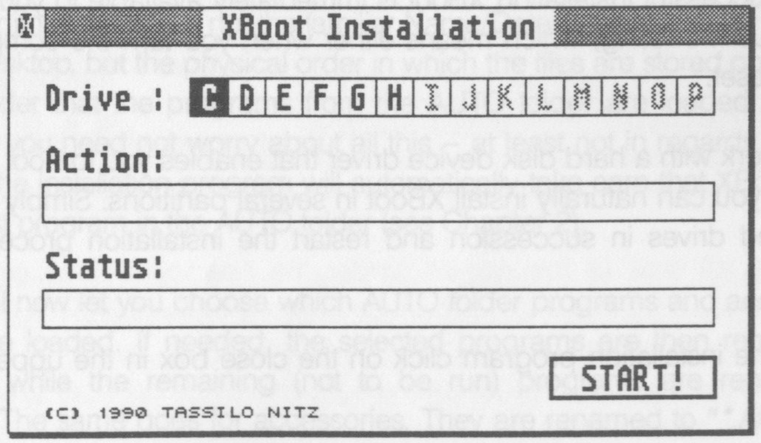
2.1 Disk contents

The XBoot disk contains the following files:

Folder \XBOOT:	XBOOT.PRG	The program itself
	XBSTART.PRG	The autostarter for TOS 1.00/1.02
	XB__CONF.PRG	The configuration program
Root directory:	INSTALL.PRG	The installation program
	README.TXT	A text file with remarks or important information not contained in the handbook

2.2 The hard disk installation

XBoot is supplied with its own installation program that automatically copies all necessary files from the floppy disk to the hard drive. To accomplish this insert the XBoot disk in the floppy drive and start the program INSTALL.PRG. The following dialog box appears:



Select in the above dialog box the partition from which you normally boot. The default is partition C:. Unless you use a special hard disk device driver which allows booting from other partitions, you should leave this setting unchanged. Keep the XBoot disk in your floppy drive and click on ›START!‹. The required files will now be read from the floppy disk and copied to the folders \AUTO and \XBOOT on your hard drive. If a folder doesn't exist it will automatically be created first. Finally – and this only if necessary – the XBOOT.PRG itself will be moved to the first slot in the AUTO folder, so that when booting it is indeed run as the very first program.

During the installation procedure you can monitor what the program currently does on the lines titled ›Action‹ and ›Status‹. After the installation has been completed a corresponding message appears.

The chosen partition now contains files XBOOT.PRG and XBSTART.PRG in the folder \AUTO, and XB__CONF.PRG and XB__CONF.RSC in the folder \XBOOT. Please do not rename these files or XBoot will not be able to function correctly.

Note: The program XBSTART.PRG is not needed if you only use an ST with TOS 1.04 or higher, a Mega STE or an Atari TT. If this is the case you can safely delete this file from the AUTO folder.

Following a successful installation XBoot is immediately available to you with each subsequent booting, which means either when you turn the computer on or after a reset.

Should you work with a hard disk device driver that enables you to boot from any partition, you can naturally install XBoot in several partitions. Simply click on the desired drives in succession and restart the installation procedure accordingly.

To exit from the installation program click on the close box in the upper left corner.

3. How to use

3.1 XBoot mode of operation

As you already may know, when your computer is turned on all (TOS) programs in the AUTO folder are loaded and executed first, followed by all accessories in the root directory of your boot partition/disk. The only requirement is that the programs in the AUTO folder have the extension ".PRG" while the accessories should have the extension ".ACC". This whole process from turning your computer on until the desktop appears is commonly known as "booting".

If the extension of an accessory is changed, i.e. the file is renamed (for example from "CONTROL.ACC" to "CONTROL.ACX"), this accessory will no longer be loaded during booting. The same goes for programs in the AUTO folder – to prevent a program from running, the extension is simply changed from ".PRG" to ".PRX". This very method is used by XBoot to indicate which programs/accessories will or will not be loaded during booting.

XBoot itself also runs from the AUTO folder. So in order to have access to all other programs XBoot must be the very first program in the AUTO folder. The sort order implied here is not the familiar Name/Date/Size/Type order as found on the desktop, but the physical order in which the files are stored on disk. It's in this order that the programs from the AUTO folder are loaded and run. However, you need not worry about all this – at least not in regards to XBoot – since the installation program will automatically take care that XBoot is run as the first program in the AUTO folder (see Chapter 2).

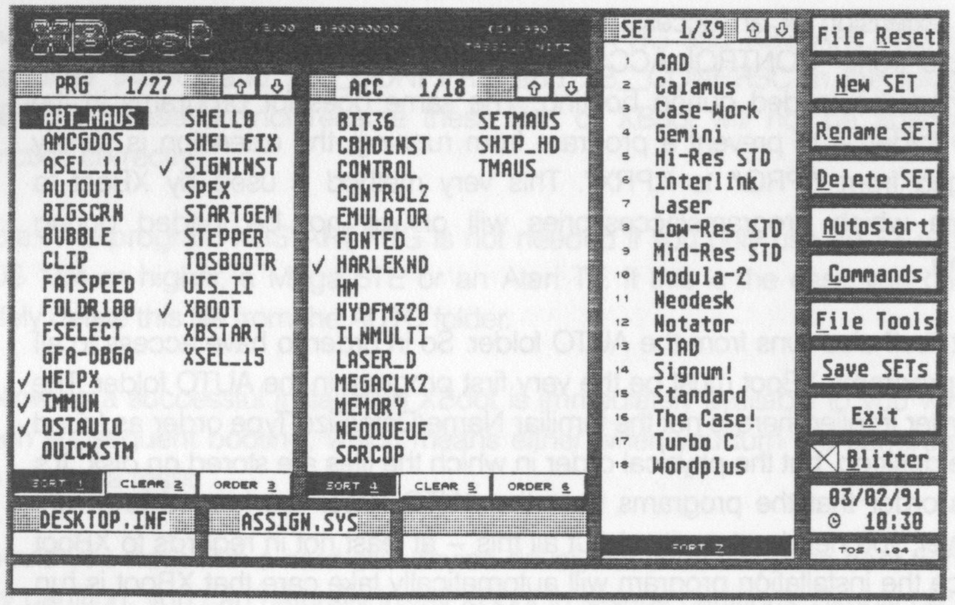
XBoot will now let you choose which AUTO folder programs and accessories should be loaded. If needed, the selected programs are then renamed to "*.PRG" while the remaining (not to be run) programs are renamed to "*.PRX". The same goes for accessories. They are renamed to "*.ACC" and

"*.ACX" respectively. It should by now be quite clear why XBoot must run as the very first program in the AUTO folder. Namely, if there are programs physically before XBoot, the renaming of these programs will only be effective during the next booting of the computer. In spite of all that, however, there are some exceptions where it makes sense to run a program before XBoot. More about this can be found in the ›PRG order‹ section.

3.2 User interface

3.2.1 Main screen

The following screen appears after starting XBoot:



Listed on the left side of the screen (under the heading ›PRG‹) are the programs in the AUTO folder (from now on referred to as "PRGs"). To the right beside them are the accessories ("ACCs"). Each heading always contains two numbers. The number on the right shows the count of available files, while the number on the left shows the number of the top left file. The

active files (i.e. the ones that are to be loaded) are indicated by a check mark. If there are write-protected (i.e "read-only") AUTO folder programs or accessories, they are shown with light characters. This serves as an indicator that such files cannot be selected.

The SETs are shown to the right below accessories (see 3.8), while alongside the right edge of the screen is a stack of buttons for invoking individual functions of XBoot. On the bottom far right of the screen are the date and time, as well as the TOS version of your ST.

Underneath the PRGs and ACCs are three small windows. They are used to select files for a SET, for example DESKTOP.INF, ASSIGN.SYS etc. (see the relevant chapter).

The line on the very bottom is the so-called Status line. After each action a remark or other info is displayed here.

3.2.2 Shortcuts

Almost all buttons in XBoot (as well as other areas which can be clicked on with the mouse) can also be invoked by using a particular keypress combination (shortcut). In most cases the key is indicated by an underlined character within the button. Such a button can also be selected by pressing ALTERNATE + character. All other shortcuts are discussed in the relevant chapters.

3.2.3 Alert boxes

XBoot remarks and error messages are displayed in alert boxes which, although not common to AUTO folder programs, you already know from regular GEM programs. They appear whenever XBoot requests you to make a decision or an error occurs. The only difference from the GEM original is that here too the buttons can be activated using shortcuts.

3.3 Selection of programs / accessories

As already mentioned in the Introduction, XBoot can be controlled either from the keyboard or with the mouse. The same goes for the selection of PRGs/ ACCs. There are two ways of activating an inactive file (no check mark) or vice versa. Either click on the file name with the mouse, or move the black cursor-bar to the file using cursor keys and then press INSERT or the SPACE bar. After starting XBoot the cursor-bar is always initially positioned on the first file in the upper left corner.

Write-protected files, indicated by light characters, are of course not selectable.

If your boot partition contains more PRGs/ACCs than can be shown on one screen, you can page back and forth. Click with the mouse on the corresponding arrow on the header line, or press SHIFT + CURSOR UP/ DOWN. When using the keyboard, the position of the cursor-bar determines whether PRG or ACC list is paged through.

Select all required AUTO folder programs and accessories as described above. If a certain selection is required frequently it's advisable to save it as a SET (see Chapter 3.7).

3.4 Displaying sorted files

SORT

A button named ›SORT‹ is always present underneath the fields containing PRGs or ACCs. By clicking on this button you can switch between displaying the files in alphabetical order or unsorted. Please note once again that the "unsorted" order is the order in which the files are actually run.

3.5 Deactivating all PRGs / ACCs

CLEAR

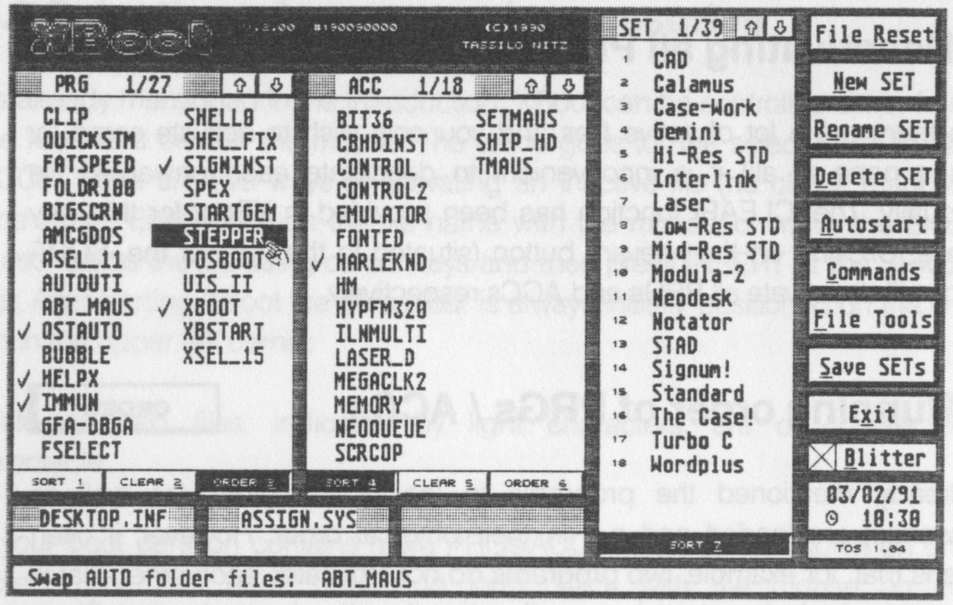
When there are a lot of active files and you only wish to activate some (or perhaps none at all) it is inconvenient to deactivate each unwanted file individually. The ›CLEAR‹ function has been provided in XBoot for this very purpose. Clicking on the relevant button (situated to the right of the ›SORT‹ button) will deactivate all PRGs and ACCs respectively.

3.6 Running order of PRGs / ACCs

ORDER

As already mentioned the programs in the AUTO folder (as well as accessories) are loaded and run in their physical order. However, it often happens that, for example, two programs do not "tolerate" each other, that is to say one or both do not work correctly when the other is also loaded. Since this can normally only be solved with a lot of hassle XBoot provides the function ›ORDER‹. It is used to change the order of programs in the AUTO folder as well as that of accessories.

After clicking on ›ORDER‹ underneath PRGs, the mouse changes to a hand with index finger and a message "Swap PRG files:" is displayed below on the status line. If, prior to the click, the programs were shown as sorted the display changes to unsorted so that the actual order of files can be observed. You can now select two programs whose positions should be swapped. Click first on one of the two files. As confirmation its name appears on the status line. Click now on the other file. The two files are then swapped and will, from now on, run in reversed order.



If, inadvertently, the first file was selected in error, simply click on it again or click on ›File Reset‹. To leave this function click either on ›Exit‹ or once again on ›ORDER‹.

If you don't wish to swap two files but only want to move a program to another slot, proceed as follows: Depending on whether the file should be moved to the beginning or the end of the list, swap the file with the one immediately above or below it repeatedly until it arrives at the desired position.

As previously indicated, XBoot should run as the first program in the AUTO folder. In exceptional cases it may be advantageous to run a program before XBoot, for example a hard disk cache program that speeds-up reading from the hard disk. If you have such a program and would always run it anyway, running it before XBoot will also substantially increase the speed of XBoot. To accomplish this you can again use the ›ORDER‹ function. Such hard drive accelerators achieve noticeable improvements only with the old versions of TOS (1.00 and 1.02). If your ST still has TOS 1.00 or 1.02, as far as the speed of the hard drive is concerned the upgrade to a newer version (1.04 or higher) is highly recommended. This will also result in speeding up of XBoot in several

areas.

Another use for the ›ORDER‹ function is with programs that belong together and must, without exception, run in a particular order. For example a RAM disk and special programs that copy the required files from a floppy/hard disk to the RAM disk. In such a case, the RAM disk must, of course, be installed first, since only then can the files be copied. If the order of such programs is wrong it can be corrected using ›ORDER‹.

3.7 SETs

The so-called SETs are central to the operation of XBoot. The reason is as follows: Each task or a work session requires a unique selection of AUTO folder programs and accessories. For example, when working with the word processor Signum, an installation program must run from the AUTO folder, and the accompanying accessories such as Screencopy, Reverse Accessory, Spooler Accessory etc. must be loaded. On the other hand, if Signum is not going to be used the above mentioned programs are not really needed – quite the contrary. The AUTO folder program will occupy unnecessary memory in the computer and the accessories occupy both memory and precious menu entries. So whenever you wish to work with Signum, instead of having to activate all of the relevant programs and accessories manually, simply create a SET called Signum containing the list of all of the necessary files. XBoot will thus reduce the process of creating a unique working environment to a simple keypress or a mouse click.

It's entirely up to you which tasks to create the SETs for. An obvious choice are the SETs for the most frequently used programs, but you can also create a standard SET for high, medium and low resolutions, whereby each one installs a unique – resolution dependant – DESKTOP.INF file. On how to handle several DESKTOP.INF or similar files refer to Chapter 4.

If, for a special occasion, you wish to create a unique configuration of PRGs and ACCs only once, you don't need to create a whole SET. Simply select the

necessary files and exit XBoot.

3.7.1 Defining a new SET

To define a new SET, activate first all of the PRGs and ACCs that should belong to this SET (see 3.3). Click on the button ›New Set‹ next, or press ALTERNATE+N.

The input cursor will now appear in the first available slot in the SET list. Give the new SET a name of your choice of up to 11 characters in length, then confirm your input with RETURN. If you change your mind, simply press UNDO or enter no name and press RETURN.

The naming of a SET defines it with the current PRG and ACC settings. In order to be able to use this SET in subsequent booting, it must also be saved in the XBoot's DEF file (see 3.7.6).

When booting XBoot for the first time there are, of course, no available SETs. This is reported when the program comes up. You can now enter all of the SETs you need as described above.

Note: AUTO folder programs and accessories which are write-protected will, for obvious reasons, not be saved in a SET, and are depending on their extension ("PRG/ACC" or "PRX/ACX") permanently active or inactive. This feature can be utilized, when for example you always wish to load a specific PRG/ACC regardless of the SET definitions you may later specify. To do this simply change the PRG/ACC file status to "read only". Naturally, the file must also have the correct extension ("PRG" or "ACC") in order to be loaded. The file status can be changed either from the desktop or with the help of the XBoot file selector (see 3.12).

3.7.2 SET selection

To select an already available SET simply click on it. The SET will be displayed in reverse and the related definitions of PRGs and ACCs will be shown. You can also use the function keys F1...F10. To facilitate ease of use each SET is prefixed with the corresponding F-key. The SETs 1 to 10 are activated with F1 to F10, while the SETs 11 to 20 by means of CTRL + F1 to CTRL + F10.

If there are more than 20 SETs, they can be paged through – exactly like PRGs and ACCs – by clicking on the arrows or by pressing "+" and "–" (on the numeric keypad).

Since in normal operation the selection is limited to clicking on a SET and XBoot is then terminated, there is another (faster) method of SET selection. With this method a SET is activated and XBoot is left immediately. To do this, instead of clicking once, use a double-click on the desired SET, or press the corresponding F-key together with the ALTERNATE key.

3.7.3 SET change

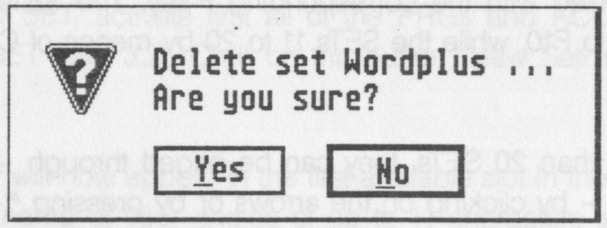
The settings in a SET can be changed anytime. However, XBoot doesn't have a special function for this purpose. Instead, simply select the SET to be changed (see above) and change the PRG or ACC settings. These changes to the selected SET will be made automatically. As an indication that a SET was really modified following a change, a dot appears after the SET name.

The name of a SET can also be changed. Click on the SET and select ›Rename SET‹. The name input is terminated as usual with RETURN or ENTER, while UNDO cancels the input without making any changes. In contrast to a defining a new SET a blank file name is not accepted here.

3.7.4 Delete SET

Delete SET

If you don't need an existing SET anymore you can remove it from the list. To do this, select the SET first and then invoke ›Delete SET‹. As a precaution an alert box will appear next:



Select ›Yes‹ if you really wish to delete the SET, or ›No‹ to cancel. The selected SET is then removed from the current list.

In order to have the SET permanently removed you must naturally save the DEF file again.

3.7.5 Sort SETs in alphabetical order

SORT

The ›SORT‹ button is situated below the SET list. Just like with PRGs and ACCs you can toggle here between the alphabetically sorted and unsorted displays. "Unsorted" means that the SETs will be shown in the same order in which you have created them. The unsorted display is useful, for example, when you are used to selecting your SETs with the F-keys.

3.7.6 Save SETs

Save SETs

In order for all changes within the SETs to remain permanent they must be saved. This is achieved by clicking on ›Save SETs‹ or with ALTERNATE + S. The settings of all SETs are then stored in the file \XBOOT\XBOOT.DEF. If the file already exists, it will be renamed to XBOOT.DBK. In this way you always

have access to the previous version of XBOOT.DEF in case you accidentally save the wrong settings.

XBoot itself monitors if the SETs were changed and asks before the program is terminated if the changes should be saved.

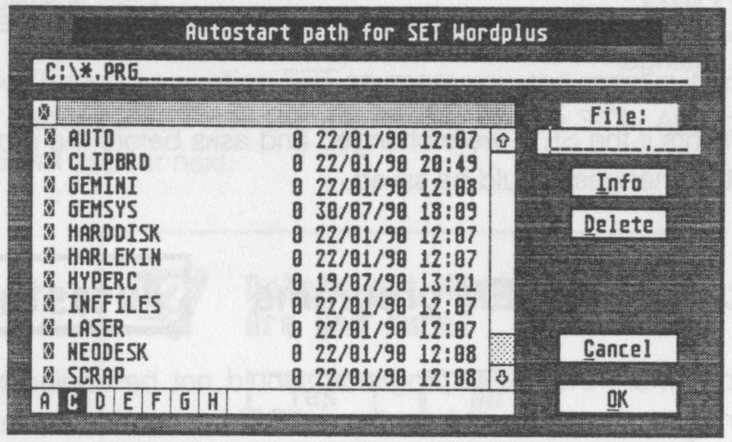
3.8 Autostarting of GEM programs

Autostart

You are probably aware that GEM programs should not be copied to the AUTO folder since they cannot run from there. "GEM programs" means all programs that make use of GEM, that is to say use the mouse, menu bar or dialog boxes. This results is inability to run GEM programs automatically, at least not with the older TOS versions 1.00 dated 1985/86 and 1.02 dated 1987.

The TOS 1.04 dated 1989 (as well as all subsequent TOS versions, for example TOS 1.06 on 1040 STE, TOS 2.xx on the Mega STE and TOS 3.xx on the TT) has, at last, a documented way of starting a GEM program after booting. However, this is limited to one single program only, i.e it is impossible to choose, during booting, which program should be run.

All these problems are solved by XBoot which allows for declaration of one autostart application for each SET, that is to say a program which will be run after loading of AUTO folder programs and accessories. Select first a SET for which you wish to specify an autostart application. Select then ›Autostart‹. The XBoot file selector appears next:



You can now select the program which should be run automatically after booting. For example, if you have a SET called "Wordplus" and wish to have the program WORDPLUS.PRG run automatically when this SET is activated, select first the drive and folder which contain WORDPLUS.PRG using the file sector, then click on the program itself and confirm everything with ›OK‹. Or, you can also just double-click on the file (›Cancel‹ terminates the input without changing anything). XBoot now checks if the specified program really exists and accepts it as the autostart application for the given SET. For your information, the complete path name is shown below on the Status line. The autostart path will, from now on, always appear on the Status line whenever the given SET is selected. If such a SET is active when XBoot is terminated, the given program will then be run automatically after booting.

It's possible to circumvent the path test in case of a file which, at the time of XBoot's running, doesn't yet exist. For example, this can occur when a program is to be started from a RAM disk, which is installed only after XBoot terminates and the relevant program is only then copied to the RAM disk. To avoid the path test, type in the complete path name on the path line of the file selector and the file name in the file name field, then click on ›OK‹ with the mouse while holding down the CTRL key.

The autostart application of a SET can always be changed or deleted. Select a SET and click again on ›Autostart‹. You can now change its path. To delete

the application, simply delete the file name in the file selector by pressing ESC and confirm with ›OK‹.

Further information on how to use the file selector can be found in the paragraph 3.12.

3.8.1 Autostart under TOS 1.00 / 1.02 (Atari ST only)

The STs which have the older TOS versions 1.00 (1985/86) or 1.02 ("blitter TOS" 1987) cannot, without additional help, run GEM programs automatically. Because of this there is an extra utility program intended especially for these TOS versions. It's called XBSTART.PRG and can, after installation, also be found in the AUTO folder of the boot drive. If you own an ST with TOS version 1.00 or 1.02, XBSTART.PRG must be present in the AUTO folder for the autostart option of XBoot to function. If you are not sure which version of TOS is in your ST, refer to the lower right corner of the XBoot screen.

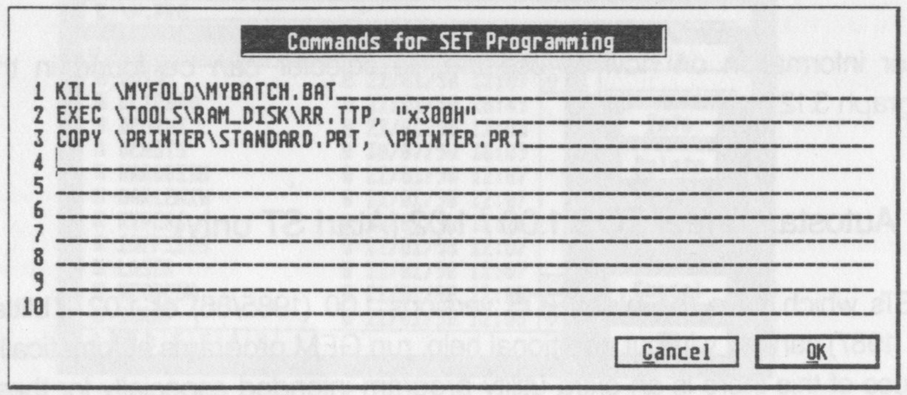
3.8.2 Autostart from TOS 1.04 on

If you own an ST with TOS version 1.04 (1989) or higher, a Mega STE or an Atari TT, the XBSTART.PRG is not needed, since from version 1.04 the operating system (TOS) itself has the capability of running GEM programs automatically. XBoot will recognize automatically which operating system is in your ST. If you have TOS 1.04 or a higher version, XBSTART can safely remain in the AUTO folder anyway. This has no negative consequences since XBSTART is then simply ignored.

3.9 File commands

A sequence of up to 10 file commands can be specified for each SET. These commands are executed automatically when the SET is activated. To associate commands with a SET select first the corresponding SET and click

then on ›Commands‹. The command line editor appears next:



Only one command per line is allowed. The descriptions of all possible commands are as follows:

COPY ‹Source› ‹Dest›	Copies the file ‹Source› and saves it under the name ‹Dest›.
NAME ‹Old› ‹New›	Renames or moves the file ‹Old› to ‹New›. No error is reported if ‹Old› file doesn't exist.
KILL ‹File›	Deletes file specified in pathname ‹File›. No error is reported if the file doesn't exist.
EXEC ‹File› "‹Cmd_line›"	Loads and runs the (TOS) program in pathname ‹File›. The command line ‹Cmd_line› enclosed in quotes is passed to the program as a parameter. This parameter line is optional.

At least one space must follow each command. The command processor is not case sensitive, i.e. upper/lower case can be mixed. In addition, a comma can be used instead of a space to separate multiple parameters for the command (as in COPY for example). The number of spaces as separators is arbitrary.

The following are allowed:

```
NAME \OLD__DESK.INF,\DESKTOP.INF
name \old__desk.inf \desktop.inf
Name      \OLD__DESK.INF, \DESKTOP.INF
nAmE \OLD__DESK.INF , \DESKTOP.INF
NAME \OLD__DESK.INF      \DESKTOP.INF
```

Not allowed:

```
NAME\OLD__DESK.INF, \DESKTOP.INF     missing space after 'NAME'
NAME \OLD__DESK.INF\DESKTOP.INF      missing space or comma
```

The individual commands can be used for a variety of tasks. For example, the COPY command can be used to install Info files (see next chapter) if more than three individual files are needed. You can use NAME to load or not to load a driver, or some other file, when a SET is activated. Or you can use KILL to assure that a particular file doesn't exist. For obvious reasons no error messages are reported if specified files don't exist.

The EXEC command can be used during booting to run (TOS) programs which are not in the AUTO folder. An example of this is a ram disk which can be configured using a command line. In this way you can use a specially adapted ram disks for each SET and still have only one copy of the ram disk program on your floppy/hard disk.

Note: If a memory resident program is run using EXEC, that – unlike a reset resistent ram disk – is not installed on top of free memory, the so-called "segmentation" of memory may occur. This means that after XBoot ends the free memory is no longer "in one piece". This can eventually lead (especially on computers with little memory) to some programs being unable to run due to lack of memory. To avoid this, the memory resident programs (such as customised file selectors or printer drivers) should be copied to the AUTO folder. As previously noted, this problem doesn't exist with reset resistent programs such as ram disks and printer spoolers which are normally installed

on top of memory.

3.10 Info files

In addition to accessories and AUTO folder programs, certain configurations frequently require various other files, which from now on will be called "Info files". These are, among others, files like DESKTOP.INF (Atari TT and Mega STE: NEWDESK.INF), ASSIGN.SYS (for GDOS) or so-called batch files for command line interpreters.

One of the most common examples of this is the DESKTOP.INF file. If you don't always use your ST in one and the same screen resolution, you must be familiar with the problem yourself: If you've set and saved the window sizes and positions in the high resolution (640 x 400 pixels), these values are totally unusable for lower resolutions on the colour monitor. Similar experiences are well known to intermittent users of large screen monitors. The only cure to remedy this situation is the administration of several DESKTOP.INF files for all possible cases, each of which will contain the desktop information such as window sizes, icon positions etc.

Another application of Info files is with ASSIGN.SYS files used by GDOS, which among others contain all character sets and device drives about to be loaded. Using XBoot you can administer several of these files, and install the desired ones as needed.

And finally one more example: A user has an Atari laser printer and uses it together with the printer driver DMC-Laserbrain. This printer driver is configured using a batch file called LASBRAIN.BAT which must be located in the root directory of the boot partition. Among other things, this file indicates which character sets should be loaded and how big is the buffer required by the driver. If the user also works with Wordplus, he then needs a whole range of character sets and a large memory for the buffer, for example 700K. If he then works with Turbo C too, he needs at least the small character set and a another, smaller, buffer of 80 Kb. It would, therefore, be desirable to have

more of these batch files available, and install only the ones which are actually needed.

These examples should prove the point. If you still aren't quite sure what this is all about, just read on. A little further down you'll find a commented, comprehensive and working example.

3.10.1 Info file installation

There is a very simple method for management and installation of Info files in XBoot, already mentioned at the beginning of Chapter 3. Perhaps you'll recall that there are three little windows under the PRGs and ACCs. The title line of each window contains the name of the relevant Info file. Immediately underneath there's room for names of files which should be installed. "Install" in this case means that XBoot creates a copy of the given file and saves it under the name of the relevant Info file, for example as DESKTOP.INF.

You can define the names of the three files by using the XBoot configuration program (Chapter 5). The first two have already been allocated to DESKTOP.INF and ASSIGN.SYS files. But they can be changed if needed.

Note for owners of the TT and Mega STE computers: This manual frequently refers to the DESKTOP.INF file which is used on the Atari ST to save important parameters about the desktop. The TT and the Mega STE have an expanded version of this file called NEWDESK.INF. All further references to the DESKTOP.INF file refer also to the NEWDESK.INF file.

For example, to install a special DESKTOP.INF file for a SET, select first the relevant SET. Click next on the free field in the DESKTOP.INF window. The file selector appears and you can now select the file which is to be installed as DESKTOP.INF. Prior to that, of course, you must have saved a DESKTOP.INF file from the desktop and changed its name, for example to 'HI__RES.INF' in case of high resolution (more about this in an example further down).

After leaving XBoot the selected file is copied and saved in the root directory as (in this case) DESKTOP.INF.

To reverse the installation of an Info file, simply delete the name of the file in the file selector and confirm with ›OK‹.

3.10.2 A little bit of hands-on experience

To better understand the last chapter here's an example. Let's assume that you normally work in monochrome (B/W monitor SM124) but sometimes, using the colour monitor, in colour as well. You can now create a specific desktop for different applications which will be installed automatically whenever you invoke the corresponding SET.

In the simplest case you would need three different DESKTOP.INF files. One for the high, one for the medium and one for the low resolution. To do this you would proceed as follows: First, start your computer in the high resolution (monochrome). It would be the best if you now create a new folder in the boot partition. Call it, for example, "DESKTOPS". Arrange all windows and icons to your taste and save this arrangement by clicking on "Save Desktop" under the menu "Options". All the settings are now saved in the file DESKTOP.INF in the boot partition. Copy this DESKTOP.INF file into the folder \DESKTOPS. Open this folder and rename the file DESKTOP.INF into, for example, DESK__HI.INF. This is done by clicking on the file and then clicking on the "Show Info" in the menu "File".

Now, reboot your computer in colour. Proceed exactly as described above and create a DESKTOP.INF file for both middle and low resolutions. Do not forget to copy the files into the \DESKTOPS folder and then rename them. Call the two new files DESK__MID.INF and DESK__LOW.INF.

At this point the folder \DESKTOPS on your boot drive should contain three files called DESK__HI.INF, DESK__MID.INF and DESK__LOW.INF.

Perform a reset and wait until XBoot comes up on the screen. It is assumed that you have already created the following four SETs "Wordplus", "Hi-res", "Mid-res" and "Low-res", whereby the "Wordplus" SET is the special SET for the word processor Wordplus, while the other three are the standard SETs for each of the three possible resolutions. Select now the DESKTOP.INF file DESK__HI.INF for the "Wordplus" and "Hi-res" SETs, DESK__MID.INF file for the "Mid-res" SET and DESK__LOW.INF file for the "Low-res" SET. This is done, as described earlier, by clicking on the window with the title ›DESKTOP.INF‹ and then selecting the desired file from the file selector.

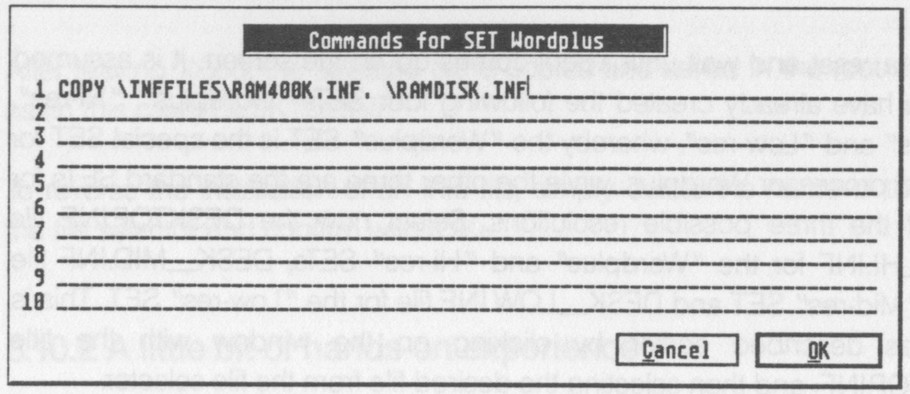
If there were no errors, the appropriate DESKTOP.INF file will from now on always be installed and you can start working on a tidy desktop.

The choice of file types is completely free and depends only on your own requirements. You are therefore in no way limited to DESKTOP.INF or ASSIGN.SYS. Chapter 4 explains how to change the name of an Info file.

3.10.3 Installation with COPY

Sometimes you need more than three different Info files, for example in addition to DESKTOP.INF, ASSIGN.SYS and LASBRAIN.BAT you may need configuration files for your graphic card, a ram disk or a printer spooler. This too can be handled by XBoot with the COPY command, already mentioned in chapter 3.9.

Let's assume you already have three Info files DESKTOP.INF, ASSIGN.SYS and LASBRAIN.BAT, however for some SETs you also need an Info file for your ram disk called RAMDISK.INF which must be located in the root directory of your boot partition/disk. The \INFFILES folder contains two different versions of this Info file, for example a RAM200K.INF for a 200 K ram disk and RAM400K.INF for a 400 K ram disk. To always use a 400 K ram disk with your "Wordplus" SET, select this SET and click on ›Commands‹. Enter now on the first empty line the command COPY \INFFILES\RAM400K.INF, \RAMDISK.INF:



This results in a 400 K ram disk being installed whenever the "Worlplus" SET is activated.

3.11 File reset

File Reset

As long as you do not leave XBoot, it's always possible to reverse all changes made to PRGs and ACCs. To do this select ›File reset‹. All PRGs and ACCs which were active before running XBoot are again restored to their active state. Conversely, all files which were activated will by this operation revert to their inactive states.

3.12 File Tools

File Tools

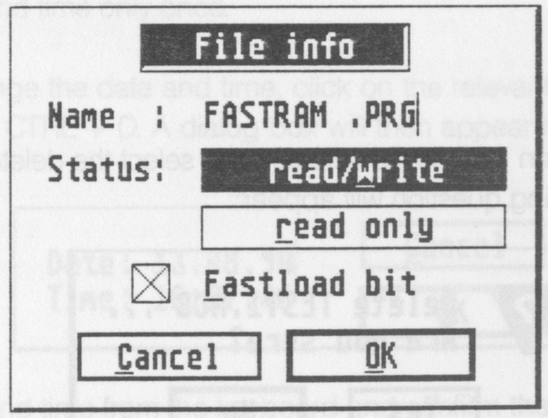
The XBoot files selector was already mentioned in section 3.8 where it served to select the autostart programs. But the file selector also offers a whole series of additional, useful functions which can be invoked separately with ›File Tools‹. You can use them to quickly peek into various directories on your hard or floppy disk, to delete, rename or change the file status, or to set/clear the fastload bit of an AUTO folder program or an accessory.

The operation of the file selector is in most parts identical to the original TOS file selector. The most important differences in brief are as follows:

- In addition to file name, the file size and date/time of last change is also shown.
- To change a drive, click on the corresponding field underneath the files, or press CTRL + drive letter.
- Double-clicking on an arrow will get you to the top or the bottom of the file list respectively.

3.12.1 File info

To get more info about a file, click on it first. Its name will then appear in the selection field. Select now the ›Info‹ option. A small dialog box appears next containing the file name and its status, that is to say if the file is write protected ("read only") or not ("read/write").



You can now change both the file name and status. Confirm the changes with ›OK‹ or select ›Cancel‹ to abandon the changes.

If you work with TOS 1.04 or with one of the newer versions, you can also set or clear the so-called fastload bit on all executable files – normally these are the files with extensions PRG, TOS, TTP or APP. If the bit is clear, the whole available memory in the ST is cleared following the loading of the program. But if the fastload bit is set the TOS skips the clearing of memory. This results in markedly faster loading of the program and is particularly apparent on STs

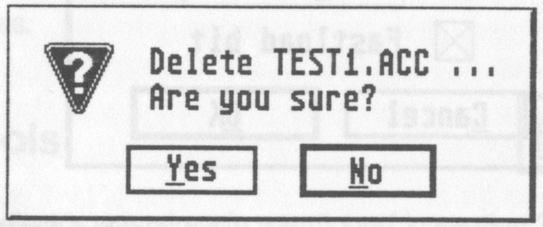
with more than 1 Mb of RAM. Therefore, if you set the fastload bit on all your AUTO folder programs and accessories, you can considerably accelerate the booting even after a sizeable memory upgrade.

Of course, when using the fastload bit you ought to proceed with caution, since not all programs will run correctly after the setting of this bit. You should, therefore, not set this bit in all programs and accessories in one go, but one file at a time and then boot to test if the program performs without errors. The rule of thumb here is that almost all AUTO folder programs will tolerate the setting of the fastload bit, but only a few accessories will. The moral: better safe than sorry.

And once again, the fastload bit is only relevant from TOS 1.04. On old TOS versions it has no bearing whatsoever.

3.12.2 Delete file

To delete a file, click on it in the file selector and select the delete option. As a precaution the following question will appear:



3.13 Blitter (Atari ST only)

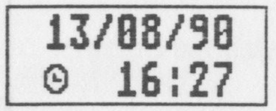
If you have a Mega ST (STE) with a built-in blitter, you can turn it on and off by clicking the buttons above the date display. If a SET is active the current blitter setting is saved in the SET.

If your ST has no blitter, this field cannot be selected.

3.14 Processor Cache (Atari TT only)

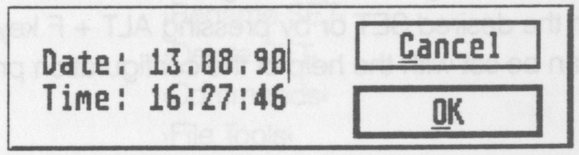
When using an Atari TT you can set the status of the processor cache instead of the blitter during booting. If a SET is active, the cache setting will be saved in this SET.

3.15 Date and time



If you don't have a built-in battery backed-up clock in your ST you can enter the system date and time yourself. Using the configuration program (see Chapter 5) you can request XBoot to automatically ask for the date and time when it starts up. XBoot also takes care that the date and time are maintained even after a reset. Consequently, after turning your computer on you need to enter the date and time only once.

To enter or change the date and time, click on the relevant field in lower right corner, or press CTRL + D. A dialog box will then appear in the middle of the screen:



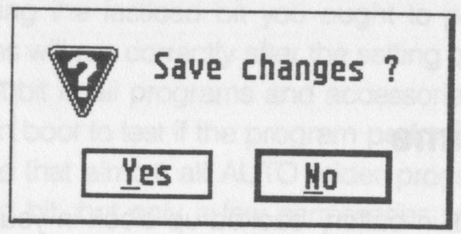
Enter the date and time from the keyboard and confirm the input with ›OK‹.

Only the parts of the date which you have entered will be taken. So, if for example, the current date is February 7, 1990 and you wish to change it to February 8, 1990 you only need to enter the "8".

When entering the time, the minutes and the seconds will be set to zero if they aren't specified, i.e. after entering "11" the system time reads 11:00:00.

3.16 Leaving XBoot

To leave XBoot select ›Exit‹ or press the ESC key. If any values within the SETs have been changed but not yet saved a warning appears:



If you choose ›Yes‹ the current state of the SETs will be saved in XBOOT.DEF.

Following that the PRGs/ACCs will, depending of their settings, be renamed to *.PRG/*.ACC or *.PRX/*.ACX. If a SET was active (shown in reverse), its commands – if present – will be executed (see 3.9) and its Info files and the autostart application – if specified – will be installed.

As previously mentioned the selection of a SET and immediate termination of XBoot can be performed together by a single mouse click/keypress, i.e. by double-clicking on the desired SET or by pressing ALT + F key. The speed of the double-click can be set with the help of the configuration program.

3.17 Overview of mouse and keyboard instructions

Following is a summary of mouse and keyboard functions in XBoot:

Keyboard control:

- File selection with the help of cursor keys.
- (De)Activating of PRGs and ACCs using SPACE or INSERT
- Selection of SETs 1..10 with F1..F10, SETs 11..20 with CTRL + F1..F10
- Page back/forward for PRGs/ACCs using SHIFT + ARROW UP/DOWN, or paging for SETs using +/– (on the numeric keypad)
- Select SET xx and immediately leave XBoot with ALT + Fxx.

Shortcuts:

ALT + R / UNDO	›File reset‹
ALT + N	›New SET‹
ALT + E	›Rename SET‹
ALT + D	›Delete SET‹
ALT + C	›Commands‹
ALT + F	›File Tools‹
ALT + A	›Autostart‹
ALT + S	›Save SETs‹
ALT + X / ESC	›Exit‹
ALT + B	Change blitter status (Atari ST only)
ALT + H	Change CPU cache status (Atari TT only)
CTRL + D	Enter date/time
ALT + 1	›SORT‹
ALT + 2	›CLEAR‹ for AUTO folder programs
ALT + 3	›ORDER‹

ALT + 4	›SORT‹
ALT + 5	›CLEAR‹ for Accessories
ALT + 6	›ORDER‹
ALT + 7	›SORT‹ for SETs

Mouse control:

- (De)Activating of PRGs and ACCs by clicking.
- SET selection by a mouse click.
- Page back/forward by clicking on the corresponding arrow.
- Select a SET and immediately leave XBoot by double-clicking on a SET.

Keyboard layout for data entry (e.g. date/time, SET name):

ESC	Deletes the complete input field
DELETE	Deletes the character to the right of cursor
BACKSPACE	Deletes the character to the left of cursor
ARROW LEFT	Move cursor one character left
ARROW RIGHT	Move cursor one character right
SHIFT + ARROW LEFT	Move cursor to start of field
SHIFT + ARROW RIGHT	Move cursor to end of field
RETURN / ENTER	Confirm input
UNDO	Cancel entry of a SET name

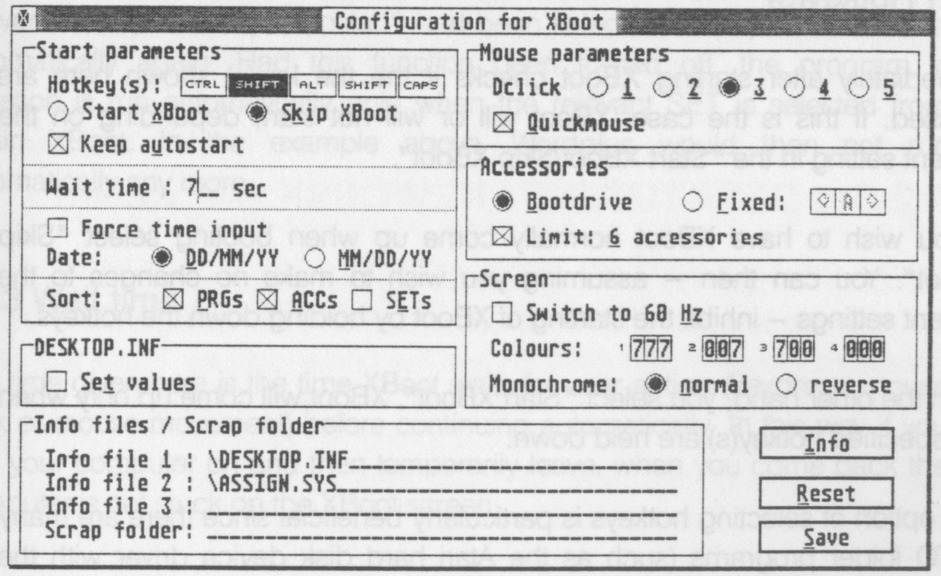
In the file selector:

ALT + I	Show selected file info
ALT + D	Delete selected file
CTRL + ESC	Change to higher directory
CTRL + character	Change current drive

4. Configuration

In the \XBOOT folder you will find a program called XB__CONF.PRG. Using this configuration program you can customize XBoot to your needs.

Run the program from the desktop by double-clicking. After loading, the program displays the current settings and appears as follows:



Note: If the XBOOT.PRG file is not in the AUTO folder on the same drive, a request to locate XBoot appears. In the file selector which follows next, you must indicate to the program on which drive and in which folder XBoot can be found.

You can then modify the shown settings and by clicking on "SAVE" store them permanently. This will cause the XBOOT.PRG itself to be patched and no separate files are created.

To reverse all changes click simply on "RESET". The parameters will then be read in again. Click on the close box in the upper left corner to exit from the

configuration program.

Following is the explanation of all modifiable parameters:

4.1 Start parameters

4.1.1 Hotkey(s)

Immediately after starting XBoot checks if the the key(s) shown here are pressed. If this is the case, XBoot will or will not start, depending on the current setting in the "Start XBoot/Skip XBoot".

If you wish to have XBoot normally come up when booting select "Skip XBoot". You can then – assuming you wish to make no changes to the current settings – inhibit the starting of XBoot by holding down the hotkeys.

If, on the other hand, you select "Start XBoot", XBoot will come up only when the specified hotkey(s) are held down.

The option of selecting hotkeys is particularly beneficial since there are many AUTO folder programs (such as the Atari hard disk device driver with the ALTERNATE key) which also watch for special keys. Since, in most cases, the programs in the AUTO folder run quickly one after the other, it can happen that a wrong program is inadvertently either deactivated or run.

Do note that to invoke the hotkey function the exact keys must be held down. For example, if the left SHIFT key is specified, then this very key must be pressed to skip/start XBoot.

If XBoot is run from the desktop instead of the Auto folder (which occurs rarely, if at all), XBoot still shows up on the screen. In other words it makes no difference what the current XBoot hotkey function configuration is. The reason for this is quite obvious: if someone doubleclicks on XBoot from the desktop he did it because he wants to run it!

4.1.2 Keep autostart

You can specify here if the autostart, installed during the last boot, should be retained, when the starting of XBoot is suppressed by the hotkey function. An example should clarify this: You select in XBoot a SET which has an autostart defined for it, for example WORDPLUS.PRG. Next, perform a reset. The computer reboots. This time, however, suppress XBoot by holding down the relevant hotkey. If "Keep autostart" had been selected, Wordplus will be run automatically again. Had this function been turned off, the program in question is run automatically only when the relevant SET is selected from within XBoot. In the example above, Wordplus would then not run automatically any more.

4.1.3 Wait time

The time given here is the time XBoot waits for user action (keypress, mouse click or mouse movement) before continuing automatically. In this way if you turn your computer on and then temporarily leave, when you come back the computer is not stuck on the XBoot screen.

4.1.4 Force time input

This option is only of interest to users who own an ST without a battery backed-up clock. If this option is on, XBoot asks automatically for the current date and time after each cold start. This date and time will also survive a warm reset. If you own an ST/STE/TT with a built-in real time clock the setting here is irrelevant and XBoot recognizes this automatically.

4.1.5 Date

The standard date format in XBoot is ›DD/MM/YY‹ (D=day, M=month, Y=year). It's used for entry of the date to be shown on XBoot screen and in

the XBoot file selector. If you wish, you can change the format to ›MM/DD/YY‹.

4.1.6 Sort PRGs / ACCs / SETs

This option determines if PRGs, ACCs or SETs should initially be shown sorted in alphabetical order or unsorted in their physical order. This is only relevant when XBoot first comes up since after that you can switch between sorted and unsorted display at will.

4.2 Set DESKTOP.INF / NEWDESK.INF values

The DESKTOP.INF file contains not only the information about the position of the windows and icons on the desktop, but also the settings of the control accessory, the serial port (RS-232) and the printer defaults. These take effect only when the relevant control and emulator accessories are run. (CONTROL.ACC and EMULATOR.ACC are supplied on the Atari system disk). Because of this most ST users load both (or at least the control accessory) for the sole purpose of having these values set. This then wastes free memory and unnecessarily occupies slots in the menu.

XBoot too can set all of these values. So if you have, until now, been loading the control accessory for the sole purpose of setting the key repeat or the printer defaults, you can abandon it from now on. Instead, activate the "Set DESKTOP.INF values" function.

There is, however, one small limitation. XBoot runs from the AUTO folder and since at this point GEM (AES) has not yet been initialized, the setting of the colour registers is ineffective and the setting of the double-click is not possible.

When the relevant function is turned on the following values from DESKTOP.INF (Atari TT / Mega STE: NEWDESK.INF) are set by XBoot:

- key repeat response time and rate
- key click and bell
- printer defaults
- serial port (RS-232)

4.3 Mouse parameters

The mouse parameters refer to the operation of XBoot only. They have nothing to do with the GEM mouse settings for the desktop.

4.3.1 Double click

The speed of the double-click inside XBoot can be set here just like in the control accessory. The higher the value given, the faster must two mouse clicks follow in order to be recognized as a double-click.

4.3.2 Quickmouse

The quick mouse function is turned on and off here. If the quick mouse is active the mouse pointer moves twice as fast. This is particularly convenient for working in XBoot.

4.4 Accessories

4.4.1 Drive

Hard drive owners normally boot from drive C:, that is to say the programs in the AUTO folder and the accessories are loaded from this drive. But there are hard disk device drivers which enable booting from any partition, for example drive E:. If you use one of those drivers, it's advisable to install XBoot in several partitions (see Chapter 2).

However, there are also hard disk drivers which allow booting from any partition, but this only applies to the AUTO folder programs. This means that accessories (and the DESKTOP.INF too) always load from drive C: regardless of the boot drive. If your driver works like this, you should select the ›Fixed‹ option and enter the drive from which the accessories are actually loaded so that XBoot can adjust itself accordingly. Normally, this would be drive C:.

The standard setting is ›Boot drive‹. With this setting, XBoot uses the same drive it itself was loaded from to access accessories and the DESKTOP.INF file.

4.4.2 Limit: 6 accessories

The accessories loaded during booting are normally accessible from GEM menu in the upper left corner. As you probably know, only up to six menu entries are available for accessories. Since, normally, each accessory occupies one menu entry, this means that a maximum of six accessories can be loaded.

When this options is turned on, XBoot will automatically allow only up to six accessories to be activated. If more accessories are selected a corresponding warning message will appear.

The reason why this six accessory limit isn't necessarily always true, is that there are accessories which do not occupy a menu entry. It is therefore possible to load more than six accessories but this occurs very rarely.

4.5 Screen

4.5.1 Switch to 60 Hz

This is for colour modes only: If you would rather work with the higher screen frequency you can instruct XBoot to automatically switch from 50 to 60 Hz.

4.5.2 Colours

When using XBoot in colour the values of four colour register can be set here (just like in the control accessory). Do note, however, that this setting is only relevant to the XBoot screen and not the desktop. The desktop colours are set using the DESKTOP.INF file (if the control accessory is loaded) or are set to default values (if the CONTROL.ACC is not loaded).

4.5.3 Monochrome screen

In case of high resolution you can select if the display should be normal or in reverse. This setting also applies to XBoot screen only.

4.6 Info files

As already mentioned in Chapter 3 the names and paths of the three Info files can be set using the configuration program. The paths for DESKTOP.INF and ASSIGN.SYS are already predefined. To change a path of an Info file just click on the relevant field. A file selector will appear next. Define the path of the Info file here. The path can be entered from the keyboard as well. To do this move the cursor using the arrow keys on the input line of the relevant Info file.

On the Atari TT and Mega STE it doesn't make much sense, of course, to install DESKTOP.INF files (however our own tests have shown that if NEWDESK.INF is not available the relevant information from DESKTOP.INF is used). But because of the fact that the majority of users own an Atari ST (at least at the moment) the default path for the first Info file remains \DESKTOP.INF. Mega STE and TT users may simply change this to \NEWDESK.INF.

4.7 Scrap folder

It can sometimes happen that XBoot cannot rename a PRG or an ACC. For example, one reason for this can be that there are two versions of one accessory in the root directory. One with the extension ".ACC" and the other with ".ACX". An attempt to activate or deactivate either of these two files will of course fail, since a file with that name already exists. In such a case a folder can be defined into which XBoot will move any files it cannot rename. This can be any folder with the exception of the AUTO folder. It's best to define a special folder for this particular purpose. The only requirement is that this folder must be in the root directory.

To define a scrap folder click on the line ›Scrap folder‹. A file selector will appear next. Enter the drive and path of the scrap folder. Here too, the entry of a path is also possible from the keyboard.

Note: The Scrap folder has nothing to do with the GEM scrap folder or clipboard. It is only for XBoot's internal use.

5. Appendix

5.1 The XBOOT.DEF file

As already mentioned in Chapter 3, the settings in all SETs, which means all active PRGs/ACCs as well as autostart applications, can be saved in the XBOOT.DEF file using ›Save SETs‹. This file is located in the folder \XBOOT. It's a plain ASCII file.

Syntax

- XBOOT.DEF is a plain ASCII file.
- Each line must end with an LF (ASCII code 10), CRs (ASCII code 13) are ignored.
- The length of the file is not limited.
- Only one command or a file name are allowed on each line.
- Leading and trailing spaces on a line are ignored.
- Any number of blank lines may be inserted anywhere.

5.1.1 Defining a SET

For each defined SET a structure with the following layout is created in XBOOT.DEF:

#SET ‹Set__Name›	SET name (11 characters maximum)
#START ‹Autostart›	Autostart application (optional)
#BLITON/BLITOFF	Blitter on/off (Atari ST only)
#CACHEON/CACHEOFF	CPU cache on/off (Atari TT only)
#INFO1 ‹Info file 1›	Info file installation (optional)
#INFO2 ‹Info file 2›	
#INFO3 ‹Info file 3›	
#COMMANDS	File commands block (optional)
‹CMD 1›	with up to 10 commands (see 3.9)
‹CMD 2›	

```
      ‹CMD 3›
      . . .
   #PRG                          The file names of active AUTO folder
      ‹PRG 1›                    programs follow next (just files names
      ‹PRG 2›                    without extensions)
      ‹PRG 3›
      . . .
   #ACC                          And now the names of active
      ‹ACC 1›                    accessories (WITHOUT extension)
      ‹ACC 2›
      ‹ACC 3›
      . . .
#ENDSET
```

5.1.2 An example of a DEF file

The paths for the three Info files in this example are \DESKTOP.INF, \LASBRAIN.BAT (batch file for the laser printer accessory Laserbrain) and \HARLEKIN\HARLEKIN.DEF (configuration for the Harlekin accessory):

```
* Definitions for XBoot V2.0    (C)1990 Tassilo Nitz

#SET Hi-Res Std                          SET No.1: standard monochrome SET
   #BLITON                               blitter on
   #INFO1 \DESKTOPS\HI__DESK.INF         install a monochrome desktop
   #INFO2 \LASER\NORMAL.BAT              normal printer buffer, 1 font
   #INFO3 \HARLEKIN\STANDARD.DEF         standard Harlekin parameters
   #PRG                                  active AUTO folder programs
      FOLDR100
      HABOO
      IMMUN
      QSTAUTO
   #ACC                                  active accessories
      BIT36
      ENCRYPT
      HARLEKND
   #ENDSET

#SET Wordplus                            Wordplus SET
   #START E:\TEXT\WORDPLUS.PRG           run Wordplus automatically
   #BLITON                               blitter on
   #INFO1 \DESKTOPS\TXT__DESK.INF        special Wordplus desktop
```



```
   #INFO2 \LASER\BIG.BAT                 big buffer, all fonts
   #INFO3 \HARLEKIN\STANDARD.DEF         standard Harlekin parameters
   #PRG                                  active AUTO folder programs
      CLIP
      FOLDR100
      HABOO
      IMMUN
      QSTAUTO
   #ACC                                  active accessories
      ENCRYPT
      HARLEKND
      SNAPSHOT
#ENDSET
: : : : : : : :
: : : : : : : :
etc. etc.
```

5.2 Maximum file count

XBoot can handle the following number of files:

SETs	40
Active PRGs per SET	40
Active ACCs per SET	20

5.3 Error messages

Any errors that occur either while using or after terminating XBoot are immediately reported. A distinction must be made between TOS (GEMDOS) errors – which mostly happen during file operations – and internal XBoot errors.

The errors are always shown in alert boxes. When an error occurs after clicking on ›Exit‹ or double-clicking on a SET, a choice is given between ›Stop‹ and ›Continue‹. If you choose ›Stop‹, you will be returned to XBoot so you can, for example, select another SET.

TOS error messages

–1: General error
Like it says...

–2: Drive not ready
The drive is off or is not connected.

–4: CRC error
Error reading a sector from floppy or hard disk.

–6: Seek error
The drive cannot access the requested track.

–7: Unknown media
Incorrect boot sector on floppy/hard disk.

–8: Sector not found
The requested sector was not found.

–10: Write error
Error writing to a file. Can occur during saving of the definition file (›Save SETs‹) or during installation of an Info file.

–11: Read error
Error reading from a file. This can occur at the beginning of XBoot when an attempt is made to read the definition file XBOOT.DEF or during installation of an Info file.

–13: Write protect
This error occurs during an attempt to change a file on a write protected disk.

–14: Media change
The disk was changed since the last write access.

–15: Unknown device
The specified device is not known to the operating system.

–33: File not found
The specified file does not exist. This message can, for example, appear when specifying an autostart application for a SET.

–34: Path not found
The specified folder does not exist.

–35: Too many open files
This error should not occur during XBoot.

–36: Access denied
There can be many reasons for this error. Access to a write protected file is the most common. This can happen when you attempt to delete a write protected file from the file selector. In that case you would first have to change the file status from "read only" to "read/write".

–39: Not enough memory
Not enough memory (RAM) available for the operation of XBoot.

–46: Invalid drive
An invalid drive letter was given.

–66: Not a GEMDOS file
An attempt was made to run a file which did not have the correct GEMDOS format.