

# gateWay™

## User's Manual



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# Section 1

## Welcome to the gateWay

### Introduction and Acknowledgements

It is important to understand that the gateWay is more than a replacement deskTop - the gateWay represents a whole new philosophy of working with GEOS. From the creation of a new boot disk, to disk drivers and the gateWay itself, you will perceive a new level of sophistication with GEOS.

It is important to note that we developed the gateWay keeping the serious GEOS user in mind. While the gateWay will operate on single drive systems, and on systems without RAM expansion, the gateWay was specifically designed with multi-drive, RAM-expanded systems in mind. Specifically, we developed the gateWay on the following equipment:

- Commodore 128D
- CMD HD-20 hard drive
- Commodore 1581
- Commodore 1764 REU (expanded to 1 Mb)

At various times, we also used the following items for development:

- CMD RAMLink (4 Mb)
- PPI RAMDrive (2 Mb)
- Schnedler Systems Turbo Master CPU
- Berkeley Softworks GEORAM
- Commodore 1541
- Commodore 64

The creation of the gateWay involved many people in one way or another. Thanks for advice and pointers along the way go to Joe Buckley, Jean F. Major, Jim Collette, and Peter and Paul Hughes. Thanks as well to the folks at CMD for making it all possible. While Mark was too busy with RAMLink to know what I was doing, thanks to Charlie for the encouraging words, to Doug Cotton for his suggestions and insights and his help with organizing and editing the documentation, and to Charlie Sr. who took it all on faith there really was a gateWay, and occasionally reminded that the deadline was last week...

And lastly, thanks to Noelle, Dylan and Alexander who put up with long hours and even longer days. And yes, Alexander, you do have a father...

### A Note From CMD

Many long hours have gone into making gateWay, mostly by Paul in developing the software. Many others put great effort into testing and evaluating the product, and creating this documentation. Altogether, the gateWay has taken about 9 months to develop - and long term development is costly. Yet, we feel compelled to keep the product affordable, and we feel that it is a good value to the GEOS

user. The gateWay may just be the product that can convince many non-GEOS users to reconsider the possibilities...

For buying this product, and for supporting those who continue to support you, we at CMD would like to take this opportunity to say thank you. Simultaneously, we would like to urge you not to make copies of this product to give to your friends. It is only through continued sales that we will be able to continue supporting Commodore users with exciting new products such as this. So show it to your friends, talk about it, let them see the manual - but if they ask you for a copy of the software, please tell them that you do not wish to contribute to the decline of companies who still support your computer.

## **Warranty**

CMD warrants the disk to be readable and free from manufacturing defects for a period of 90 days from time of purchase. If, within that time, the disk should fail to be readable, contact CMD for a replacement disk. After 90 days, CMD will replace disks for a nominal fee. CMD cannot guarantee this product to be fit for any particular purpose, either in part or in whole, nor can we guarantee that the software itself is free from all bugs or errors. CMD cannot be held responsible for loss of data resulting from or in connection with the use of this product, whether that loss be either consequential or inconsequential, nor can CMD be held liable for any damage to your equipment through the improper use of this product.

## **How to Use This Manual**

Please note that throughout this manual, unless differences exist, we refer to all versions of the GEOS operating system as GEOS. We take this same approach when talking about either gateWay 64 or gateWay 128 and their associated files. It is important to remember these differences when, for example, we mention `switcher` - gateWay 128 users should assume we mean `switcher_128`.

Section 1 of this manual is introductory, but also explains what you must have in order to use the gateWay.

Section 2 discusses certain system considerations and takes you through the procedures for getting the gateWay up and running under all 2.0 versions of GEOS. Study these important areas of the manual carefully before beginning the installation process to insure that you know just how your system should be configured. These procedures apply to using the gateWay with GEOS for the 64, GEOS 128, and the versions of GEOS supplied with Berkeley Softworks' GEORAM.

Section 3 explains and discusses the main features and functions of the gateWay, and each of the separate gateWay menu items. Some of this information will be familiar to you if you have been using GEOS for a length of time, yet, there are some subtle (and some not-so-subtle) differences which this section will help to clarify.

Section 4 provides information about customizing the gateWay to suit your own personal tastes. This section also contains information about disk drivers and about integrating gateWay documents. You can use much of the information in this section (and the following sections) interactively - as you begin using the gateWay.

Section 5 contains information about the use and capabilities of switcher, our task switching mechanism. If you intend to use switcher on your system, you should read this section thoroughly.

Section 6 discusses how to optimize the gateWay for speed. This can be read at your leisure after you have become comfortable with the gateWay and its features.

Most especially, remember that most problems in using any product usually stems from not reading the supplied documentation. If you find yourself uncertain about some aspect of the gateWay - check this manual carefully for associated subjects.

## **What you need to run the gateWay**

The following software and hardware list gives the minimum requirements needed to operate the gateWay. While the gateWay can be operated from the minimum system requirements given, we highly recommend expanding your system beyond these requirements to get the most benefit from using gateWay.

### **Required Software:**

- any original 2.0 version of Berkeley Softworks' GEOS
- the gateWay System disk

### **Required Hardware:**

- a Commodore 64 or 128
- a 1541 or 1571 disk drive
- a mouse, joystick, or some other GEOS supported input device

### **Other Requirements:**

- a blank disk in a format supported by one of the drives on your system

### **Optional Equipment:**

- a RAM Expansion Unit. Not only does RAM expansion dramatically improve the performance of GEOS, it also helps with the use of multiple drives of different types (i.e., 1541 and 1581). The gateWay supports CMD's RAMLink, PPI's RAMDrive, Berkeley Softworks' GEORAM, and all Commodore 17xx series REU's.
- additional drives, for example Commodore's 1581 3.25" disk drive, or a CMD HD Series hard drive.
- a GEOS supported printer. See your GEOS 2.0 manual for a list of supported printers.



**CMD and PPI Device Requirements:**

- CMD HD Series hard drives must have HD DOS v1.80 or higher
- CMD RAMLink must have RL DOS v1.40 or higher
- PPI RAMDrive must have RD DOS v1.40 or higher

## **Section 2**

### **Getting Started**

#### **About Creating Boot Disks**

The gateWay disk included with this package is a master disk. It contains several files which you will copy under GEOS to 'build' a boot disk for your particular system. The general steps involved in boot disk creation are as follows:

- boot GEOS
- format a disk on your intended boot device
- copy required files from your gateWay and GEOS system disks to your new boot disk
- place boot disk in boot device and execute MakeBoot

#### **Important Considerations for Boot Disks**

To avoid common problems linked with making gateWay boot disks, study the following paragraphs before moving on to the Installation procedures.

#### **Configure Boot Device Before Executing MakeBoot**

When you create a boot disk, the gateWay will often assume you will boot that disk from the same drive type and device number when you created the boot disk. Therefore, it is recommended that you do not, for example, create a boot disk on device 8, then try to boot with it from device 9.

#### **1571 Boot Disks Must be Single-Sided**

Boot disks created on 1571 disk drives must be formatted as single-sided disks. Trying to boot from double-sided 1571 disks may cause boot failure. Before executing MakeBoot on a 1571 drive, confirm that you configured the drive as a 1571 using the GEOS CONFIGURE program.

#### **Create Separate Boot Disks for gateWay 64/128**

If you use both versions of gateWay (64 and 128), you should have separate boot disks for the two systems. For CMD devices (RAMLink, RAMDrive, and the HD Series hard drives) you should have separate boot partitions. This is to avoid having both LAUNCH and LAUNCH\_128 (auto-exec files) execute automatically during the boot process.

#### **Avoid Placing Auto-exec Files on Boot Disks**

Do not place any extra auto-execs on your gateWay boot disk until you are sure that your boot disk works properly. After that, you should test them one at a time for compatibility. Some auto-exec files may try to use areas of memory normally used by the gateWay, creating conflicts.

## **Switcher**

If you intend to use the task switcher with your RAM expanded system, the version of switcher that you will need on your boot disk is determined by the type of GEOS kernel you boot from when creating the boot disk. If you create your gateWay boot disk from a GEORAM system disk, then use switcher.bsw (or switcher128.bsw for gateWay 128). If you boot with a standard GEOS kernel, then use switcher.cbm (or switcher128.cbm for gateWay 128).

## **Integrator For gateWay 64**

The Integrator is a special auto-exec file for use with gateWay 64 which allows using two disk drives on systems without RAM expansion. Ignore all references to the Integrator in the manual when dealing with gateWay 128, as the 128 version does not have or need the Integrator to use two disk drives on systems without RAM expansion.

## **Installation Information and Procedures**

Installing the gateWay can be simple, however, the more devices you have attached to your computer, the more complex installation becomes. To help ease installation problems, we have created separate installation procedures for different hardware configurations. The possible configurations are:

- Single Drive Systems
- Systems Without RAM Expansion
- Commodore REU Systems
- GEORAM Systems
- RAMDrive and RAMLink Systems
- Combined RAM Systems

Choose the section which most closely describes your hardware configuration. Because you will be creating a new boot disk which will be specific to your system hardware, we suggest you study the proper section until you are comfortable with the procedures described.

## **Booting From CMD Devices**

If you own a CMD HD Series hard drive, RAMLink, or PPI RAMDrive, you may set up your gateWay to boot from these devices. First, create a boot disk on a floppy device which is normally supported by GEOS. Once you are able to boot from that disk successfully, and can recognize and use your CMD or PPI device, select a partition for use as a boot partition. Then copy all of the files from the floppy boot disk you made to this partition. Make the CMD or PPI device active by clicking on the disk icon representing it. Locate the copy of MakeBoot on that device, and execute it by double-clicking on its filename. When MakeBoot is finished, you will have a bootable version of gateWay on your device.

## **Single Drive Systems**

Using the gateWay on systems equipped with only one disk drive places some severe restrictions on the system, mainly in copying disks and files. The gateWay does not support copying either disks or files

from one disk to another - this capability is only available under the standard GEOS deskTop itself.

Single disk systems can use the gateWay as a point of operation, and this will allow the single disk system user to use the gateWay's more streamlined approach to finding files, and the many other subtle features that gateWay provides.

### **Single Drive Installation Procedure**

- turn on your 64 or 128 and boot GEOS as you would normally. Be sure to use an original, unmodified GEOS boot disk for booting.
- remove the GEOS System disk from Drive A and insert the gateWay System program disk. Click on the disk icon representing Drive A to open the gateWay System disk.
- from the menu bar, select disk. After the disk menu unfolds, click on validate. The deskTop will now validate your gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, insert a blank disk into drive A.
- pull down the disk menu and select format. When the format dialog box appears, enter a name for your new gateWay boot disk and press the <RETURN> key (if you are creating a boot disk on a 1571 drive, be sure to select a single-sided format).
- when the format is complete, copy the following files from the gateWay System disk to the newly formatted disk. Note that the filenames given are for gateWay 64 with the gateWay 128 filenames shown in parenthesis.
  - GEOS (GEOS128)
  - GATEWAY (GATEWAY\_128)
  - LAUNCH (LAUNCH\_128)
  - MakeBoot64 (MakeBoot\_128)
- if your disk drive is a Commodore 1541 or a 1541 compatible disk drive, copy the CBM1541 disk driver to your new boot disk.
- if your disk drive is a Commodore 1571 or a 1571 compatible disk drive, copy the CBM1571 disk driver to your new boot disk.
- copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Be sure that the drivers you intend to use most are the first ones on the disk.
- Open the new boot disk by clicking on the icon of the drive containing the new boot disk.
- Double-click on the MakeBoot icon.

After a few moments, you should be back at the deskTop (gateWay may request that you re-insert a disk containing the GEOS deskTop). There will be a new file on your boot disk named GEOBOOT (or GEOBOOT128). The gateWay will always be booted from this disk. If you make dramatic changes to your system hardware later, you should create a new gateWay boot disk using the correct procedure for that system.

Turn your system off now and go to the section titled, 'gateWay for the First Time'.

## **Systems Without RAM Expansion**

Using the gateWay on systems not equipped with some form of RAM expansion will place two basic restrictions on the system. Since gateWay 64 normally uses part of your system's RAM expansion to store information about extra disk drivers, and because each drive type on the system must have a separate driver, using more than one drive must be handled in a different manner. An auto-exec program called the Integrator, will automatically integrate the first two disk drivers found on your boot disk when gateWay is launched. Systems without RAM can only use two drives - three drive support is only possible on RAM expanded systems.

Since memory is at a premium, the addition of a second drive on a system without RAM expansion will in turn reduce how many files can be read into the gateWay's directory buffer. Normally, the gateWay can hold 144 separate filenames of a type matching the current view mode. Integrating a second driver cuts this to 68 filenames. Note: gateWay 128 does not handle handle drivers the same way as gateWay 64 does, so this limit does not apply, and there is no Integrator auto-exec for gateWay 128.

The other limit placed upon systems not equipped with RAM expansion is that they will not be able to use switcher, the gateWay's task switching mechanism.

## **Installation Procedure for Non-RAM Expanded Systems**

Follow the steps given here to create a boot disk for systems without any form of RAM expansion.

- turn on your 64 or 128 and boot GEOS as you would normally. Be sure to use an original, unmodified GEOS boot disk for booting.
- remove the GEOS System disk from Drive A and insert the gateWay System program disk. Click on the disk icon representing Drive A to open the gateWay System disk.
- from the menu bar, select disk. After the disk menu unfolds, click on validate. The deskTop will now validate your gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, insert a blank disk into the drive you intend to use for booting gateWay, and click on the disk icon for that drive.
- pull down the disk menu and select format. When the format dialog box appears, enter a name for your new gateWay boot disk and press the <RETURN> key (if you are creating a boot disk on a 1571 drive, be sure to select a single-sided format).
- when the format is complete, copy the following files from the gateWay System disk to the newly formatted disk. Note that the filenames given are for gateWay 64 with the gateWay 128 filenames shown in parenthesis.
  - GEOS (GEOS128)
  - GATEWAY (GATEWAY\_128)
  - LAUNCH (LAUNCH\_128)
  - MakeBoot64 (MakeBoot\_128)
- if you plan on using your system with two drives of differing types, copy the Integrator auto-exec to your new boot disk.

- copy a disk driver for each different type of drive you will be using. Please note that the order in which these disk drivers appear on the boot disk is very important. You should move the drivers over in the order in which the devices on your system are numbered. In other words, the driver for device number 8 should go on first, then the driver for device number 9 (if device 9 is a different type of drive than device 8). The following list shows which drivers are required for specific drive types:
  - CBM1541 (CBM1541\_128) - use with Commodore 1541 or 1541 compatible drives.
  - CBM1571 (CBM1571\_128) - use with Commodore 1571 or 1571 compatible drives.
  - CBM1581 (CBM1581\_128) - use with Commodore 1581 drives.
  - HardDrive (HardDrive\_128) - use with CMD HD Native Mode partitions (Note: you may only have one HD driver in an active position).
  - HD1581 (HD1581\_128) - use with CMD HD 1581 Emulation Mode partitions (Note: you may only have one HD driver in an active position).
- copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Be sure that the drivers you intend to use most are the first ones on the disk.
- open the new boot disk by clicking on the icon of the drive containing the new boot disk.
- double-click on the MakeBoot icon.

After a few moments, you should be back at the deskTop (gateWay may request that you re-insert a disk containing the GEOS deskTop). There will be a new file on your boot disk named GEOBOOT. The gateWay will always be booted from this disk. If you make dramatic changes to your system hardware later, you should create a new gateWay boot disk using the correct procedure for that system.

Turn your system off now and go to the section titled, 'gateWay for the First Time'.

## **Commodore REU Systems**

Using the gateWay on systems equipped with a Commodore REU containing 512K of RAM or more will allow you to use all the features of the gateWay. Systems using a Commodore REU with less than 512K are supported in different ways as explained in the following paragraphs.

### **128K RAM Expansion**

If you use an REU which contains 128K of RAM (Commodore 1700), you will not be able to create a RAM disk. The RAM expansion will be used to allow you to have up to three drives on the system, and you will be able to mount switcher for the purpose of task switching.

### **256K RAM Expansion**

If you use an REU which contains 256K of RAM (Commodore 1764), you will not be able to mount the switcher. It was felt that the benefits of having a RAM disk outweighed those of being able to task switch, and that a RAM disk of only 128K would be mostly useless under GEOS and the gateWay. With this system configuration you must use the Ram41\_71 driver (RamOld\_128 with gateWay 128).

## **512K RAM Expansion or More**

If you use an REU which contains 512K or more of RAM (Commodore 1750 REU or an expanded version of any Commodore REU), you will be able to use all the features of the gateWay.

Systems with 512K or more of RAM expansion can use either the RamDisk (or RamDisk\_128) driver or the Ram41\_71 (or RamOld\_128) driver. The RamDisk drivers allow you to configure a RAM disk of up to 2 Megabytes, while the Ram41\_71 or RamOld\_128 drivers are used to configure a RAM disk the same size as a 1541 or 1571. The Ram41\_71 and RamOld\_128 drivers were included for backward compatibility with programs that attempt to use areas of your RAM unit for their own purpose.

Please note that when using the gateWay RamDisk drivers, the first 128K of RAM expansion will be assumed to be allocated for GEOS and switcher system work space. For this reason, the maximum amount of memory that these drivers will let you allocate to a RAM disk will always be 128K less than the amount of RAM contained in your expander.

## **Installation Procedure for Commodore REU Systems**

Follow these procedures to create a gateWay boot disk on systems equipped with a Commodore REU.

- turn on your 64 or 128 and boot GEOS as you would normally. Be sure to use an original, unmodified GEOS boot disk for booting.
- insert the gateWay System program disk into a drive and click on the disk icon representing that drive to open the gateWay System disk.
- from the menu bar, select disk. After the disk menu unfolds, click on validate. The deskTop will now validate your gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, insert a blank disk into the drive you intend to use for booting gateWay, and click on the disk icon for that drive.
- pull down the disk menu and select format. When the format dialog box appears, enter a name for your new gateWay boot disk and press the <RETURN> key (if you are creating a boot disk on a 1571 drive, be sure to select a single-sided format).
- when the format is complete, copy the following files from the gateWay System disk to the newly formatted disk. Note that the filenames given are for gateWay 64 with the gateWay 128 filenames shown in parenthesis.
  - GEOS (GEOS128)
  - GATEWAY (GATEWAY\_128)
  - LAUNCH (LAUNCH\_128)
  - MakeBoot64 (MakeBoot\_128)
- copy a disk driver for each different type of drive you will be using. Please note that the order in which these disk drivers appear on the boot disk is very important. Place drivers on your boot disk in the order in which the devices on your system are numbered. In other words, the driver for device number 8 should go on first, then the driver for device number 9, and finally, the driver for device

number 10 (if two of your devices are of the same type, then only one driver is needed for these two devices). The following list shows which drivers are required for specific drive types:

- CBM1541 (CBM1541\_128) - use with Commodore 1541 or 1541 compatible drives.
  - CBM1571 (CBM1571\_128) - use with Commodore 1571 or 1571 compatible drives.
  - CBM1581 (CBM1581\_128) - use with Commodore 1581 drives.
  - HardDrive (HardDrive\_128) - use with CMD HD Native Mode partitions (Note: you may only have one HD driver in an active position).
  - HD1581 (HD1581\_128) - use with CMD HD 1581 Emulation Mode partitions (Note: you may only have one HD driver in an active position).
  - RamDisk (RamDisk\_128) - use with RAM devices containing 512K to 2 Mb of RAM (Note: you may only have one RAM driver in an active position).
  - Ram41\_71 (RamOld\_128) - use with RAM devices containing 256K of RAM or more, but may not be used with *switcher* (Note: you may only have one RAM driver in an active position).
- if you are not using the Ram41\_71 (or RamOld\_128) driver, and do not have a 256K REU, then copy *switcher.cbm* (or *switcher128.cbm*) from the gateWay System disk to your new gateWay boot disk.
  - copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Be sure that the drivers you intend to use most are the first ones on the disk.
  - open the new boot disk by clicking on the icon of the drive containing the new boot disk.
  - double-click on the MakeBoot64 (or MakeBoot\_128) icon.

After a few moments, you should be back at the deskTop (gateWay may request that you re-insert a disk containing the GEOS deskTop). There will be a new file on your boot disk named GEOBOOT. The gateWay will always be booted from this disk. If you make dramatic changes to your system hardware later, you should create a new gateWay boot disk using the correct procedure for that system.

Turn your system off now and go to the section titled, 'gateWay for the First Time'.

## **GEORAM Systems**

Using the gateWay on systems equipped with a Berkeley Softworks' GEORAM will allow you to use all the features of the gateWay. Systems equipped with GEORAM can use the RamDisk (or RamDisk\_128) driver, the GRamDisk (or GRamDisk\_128) driver, or the Ram41\_71 (or RamOld\_128) driver. The GRamDisk and GRamDisk\_128 drivers are similar to the standard RamDisk and RamDisk\_128 drivers, but have been optimized specifically for use with GEORAM.

The RamDisk and GRamDisk drivers allow you to configure a RAM disk of up to 2 Megabytes, while the Ram41\_71 or RamOld\_128 drivers are used to configure a RAM disk the same size as a 1541 or 1571. The Ram41\_71 and RamOld\_128 drivers were included for backward compatibility with programs that attempt to use areas of your RAM unit for their own purpose.

Please note that when using the gateWay RamDisk or GRamDisk drivers, the first 128K of RAM expansion will be assumed to be allocated for GEOS and *switcher* system work space. For this reason,



the maximum amount of memory that these drivers will let you allocate to a RAM disk will always be 128K less than the amount of RAM contained in your expander.

## **Installation Procedure for GEORAM Systems**

Follow these procedures to create a gateWay boot disk on systems equipped with a GEORAM.

- turn on your 64 or 128 and boot GEOS as you would normally. Be sure to use an original, unmodified GEOS boot disk for booting. Also, be sure that it is a GEORAM version of the GEOS system (indicated by a small 'r' in the disk name on the disk label).
- insert the gateWay System program disk into a drive and click on the disk icon representing that drive to open the gateWay System disk.
- from the menu bar, select disk. After the disk menu unfolds, click on validate. The deskTop will now validate your gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, insert a blank disk into the drive you intend to use for booting gateWay, and click on the disk icon for that drive.
- pull down the disk menu and select format. When the format dialog box appears, enter a name for your new gateWay boot disk and press the <RETURN> key (if you are creating a boot disk on a 1571 drive, be sure to select a single-sided format).
- when the format is complete, copy the following files from the gateWay System disk to the newly formatted disk. Note that the filenames given are for gateWay 64 with the gateWay 128 filenames shown in parenthesis.
  - GEOS (GEOS128)
  - GATEWAY (GATEWAY\_128)
  - LAUNCH (LAUNCH\_128)
  - MakeBoot64 (MakeBoot\_128)
- copy a disk driver for each different type of drive you will be using. Please note that the order in which these disk drivers appear on the boot disk is very important. Place drivers on your boot disk in the order in which the devices on your system are numbered. In other words, the driver for device number 8 should go on first, then the driver for device number 9, and finally, the driver for device number 10 (if two of your devices are of the same type, then only one driver is needed for these two devices). The following list shows which drivers are required for specific drive types:
  - CBM1541 (CBM1541\_128) - use with Commodore 1541 or 1541 compatible drives.
  - CBM1571 (CBM1571\_128) - use with Commodore 1571 or 1571 compatible drives.
  - CBM1581 (CBM1581\_128) - use with Commodore 1581 drives.
  - HardDrive (HardDrive\_128) - use with CMD HD Native Mode partitions (Note: you may only have one HD driver in an active position).
  - HD1581 (HD1581\_128) - use with CMD HD 1581 Emulation Mode partitions (Note: you may only have one HD driver in an active position).
  - GRamDisk (GRamDisk\_128) - use with a GEORAM containing from 512K to 2 Mb of RAM (Note: you may only have one RAM driver in an active position).
  - RamDisk (RamDisk\_128) - use with RAM devices containing 512K to 2 Mb of RAM (Note:

you may only have one RAM driver in an active position).

- Ram41\_71 (RamOld\_128) - use with RAM devices containing 256K of RAM or more, but may not be used with switcher (Note: you may only have one RAM driver in an active position).
- if you are not using the Ram41\_71 (or RamOld\_128) driver, then copy switcher.bsw (or switcher128.bsw) from the gateWay System disk to your new gateWay boot disk.
  - copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Be sure that the drivers you intend to use most are the first ones on the disk.
  - open the new boot disk by clicking on the icon of the drive containing the new boot disk.
  - double-click on the MakeBoot64 (or MakeBoot\_128) icon.

After a few moments, you should be back at the deskTop (gateWay may request that you re-insert a disk containing the GEOS deskTop). There will be a new file on your boot disk named GEOBOOT. The gateWay will always be booted from this disk. If you make dramatic changes to your system hardware later, you should create a new gateWay boot disk using the correct procedure for that system.

Turn your system off now and go to the section titled, 'gateWay for the First Time'.

## **RAMDrive and RAMLink Systems**

If you intend to use the gateWay with a PPI RAMDrive or a CMD RAMLink, you must configure your RAMDrive or RAMLink in a special way in order have the gateWay recognize your unit as a RAM expander. If you do not do this, gateWay will not allow you to use the switcher, nor will it allow you to use three drives on you system at the same time. RAMLink users who also have some other form of RAM expansion (a GEORAM or Commodore REU) attached have some other options which will be covered later (see 'Combined RAM Expansion').

If you are using a PPI RAMDrive with a Commodore REU on some type of multi-port expansion card, you must use the method described in the section 'Combined RAM Expansion'.

Please note that, while it will be possible to boot gateWay directly from RAMDrive or RAMLink, you must create a boot disk on a standard floppy drive first.

*Important: Since GEOS itself cannot properly identify RAMDrive or RAMLink, it is very important that your RAMDrive or RAMLink default device number be set to a device number which will not interfere with normal operation. GEOS uses device numbers 8 through 11, so your RAMDrive or RAMLink should be set to device number 12 or higher whenever you use the standard GEOS system.*

## **Installation Procedure for RAMDrive & RAMLink Systems**

In order to operate gateWay from RAMDrive or RAMLink equipped systems, you must configure your RAMDrive or RAMLink unit in a specific manner. This configuration can be done either before or after creating your gateWay boot disk - but it must be done before attempting to boot the gateWay system. The instructions for configuring RAMLink and RAMDrive are at the end of the instructions for creating the boot disk. We recommend configuring after you have created a boot disk, and the time to

do this is indicated in the procedure below.

- if you have a PPI RAMDrive, be sure that it is plugged in and that the ENABLE/DISABLE switch is in the ENABLE position. If you have not yet installed the RD-DOS, do so now. Also, be sure that the device number for RAMDrive is set to 12 or higher.
- if you have a CMD RAMLink, be sure that it is plugged in and that the ENABLE/DISABLE switch is in the ENABLE position. Place the NORMAL/DIRECT switch into the NORMAL position. Also, be sure that the device number for RAMLink is set to 12 or higher.
- turn on your 64 or 128 and boot GEOS as you would normally. Be sure to use an original, unmodified GEOS boot disk for booting.
- insert the gateWay System program disk into a drive and click on the disk icon representing that drive to open the gateWay System disk.
- from the menu bar, select disk. After the disk menu unfolds, click on validate. The deskTop will now validate your gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, insert a blank disk into the drive you intend to use for booting gateWay, and click on the disk icon for that drive.
- pull down the disk menu and select format. When the format dialog box appears, enter a name for your new gateWay boot disk and press the <RETURN> key (if you are creating a boot disk on a 1571 drive, be sure to select a single-sided format).
- when the format is complete, copy the following files from the gateWay System disk to the newly formatted disk.
  - GEOS (GEOS128)
  - GATEWAY (GATEWAY\_128)
  - LAUNCH (LAUNCH\_128)
  - MakeBoot64 (MakeBoot128)
- copy a disk driver for each different type of drive you will be using. Please note that the order in which these disk drivers appear on the boot disk is very important. Place drivers on your boot disk in the order in which the devices on your system are numbered. In other words, the driver for device number 8 should go on first, then the driver for device number 9, and finally, the driver for device number 10 (if two of your devices are of the same type, then only one driver is needed for these two devices). The following list shows which drivers are required for specific drive types:
  - CBM1541 (CBM1541\_128) - use with Commodore 1541 or 1541 compatible drives.
  - CBM1571 (CBM1571\_128) - use with Commodore 1571 or 1571 compatible drives.
  - CBM1581 (CBM1581\_128) - use with Commodore 1581 drives.
  - HardDrive (HardDrive\_128) - use with CMD HD Native Mode partitions (Note: you may only have one HD driver in an active position).
  - HD1581 (HD1581\_128) - use with CMD HD 1581 Emulation Mode partitions (Note: you may only have one HD driver in an active position).
  - RLDrive (RLDrive\_128) - use with PPI RAMDrive or CMD RAMLink Native Mode partitions (Note: you may only have one RL driver in an active position).
  - RL1581 (RL1581\_128) - use with PPI RAMDrive or CMD RAMLink 1581 Emulation Mode partitions (Note: you may only have one RL driver in an active position).

- if you booted your system using a standard GEOS System disk (not a GEORAM System disk), copy switcher.cbm (or switcher128.cbm) from the gateWay System disk to your new gateWay boot disk.
- if you booted your system using a GEORAM System disk, then copy switcher.bsw (or switcher128.bsw) from the gateWay System disk to your new gateWay boot disk.
- copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Be sure that the drivers you intend to use most are the first ones on the disk.
- open the new boot disk by clicking on the icon of the drive containing the new boot disk.
- double-click on the MakeBoot64 (or MakeBoot\_128) icon.
- after a few seconds, a dialog box will ask if you wish to install the RAMLink/GEOS kernal patches. Click on the YES button.

After a few moments, you should be back at the deskTop (gateWay may request that you re-insert a disk containing the GEOS deskTop). There will be a new file on your boot disk named GEOBOOT (or GEOBOOT128). The gateWay will always be booted from this disk. If you make dramatic changes to your system hardware later, you should create a new gateWay boot disk using the correct procedure for that system.

Turn your system off now. If you have not yet configured your RAMDrive or RAMLink for use with gateWay, then do so now, using the procedure given below. If you have already configured your RAMDrive or RAMLink, then go to the section titled, 'gateWay for the First Time'.

### **Configuring RAMDrive or RAMLink for gateWay**

To configure for using the gateWay with a RAMDrive only system or a RAMLink system in NORMAL mode, use the RAM-TOOLS program provided with RAMDrive and RAMLink to create a Foreign (direct access or DACC) partition of at least 512 blocks (128K). This must be the first partition created, so delete all other partitions before creating this one.

Please note that the direct access partition will never be used by you directly. It is accessed by the GEOS and gateWay system software, and used to store system variables, disk drivers, and the inactive switcher task.

If you have a RAM expander (such as a Commodore REU) plugged into the RAM Port on a RAMLink unit, and if you will be using the RAM expander with other software by placing RAMLink in DIRECT mode, then you should make the direct access partition as large as your RAM expander. The following chart gives the correct block count for different sizes of RAM expansion units.

<b>RAM</b>	<b>Expander Description</b>	<b>Blocks</b>
128K	Commodore 1700	512
256K	Commodore 1764	1024
512K	Commodore 1750 or Berkeley Softworks' GEORAM	2048
1 Mb	Expanded 17xx or GEORAM	4096
2 Mb	Expanded 17xx or GEORAM	8192

While the direct access partition must be the first partition created, it is not necessary for it to be assigned to partition number 1. In fact, it is much better to give it a partition number which will be out of the way. This avoids having it show up as the default partition if you forget to change your default partition number. We usually assign this partition number 31 when creating this partition.

After you have created the direct access partition, you must then create at least one 1581 or Native partition to use with GEOS. The gateWay provides two drivers for use with RAMDrive and RAMLink equipped systems - RLDrive and RL1581. RLDrive works with CMD Native partitions of any size, and RL1581 works with 1581 Emulation partitions. Either of these partition types may be used under the gateWay, and it is up to you to decide which type or types you desire to have available to you, and to create these with RAM-TOOLS.

You should change the default device number assigned to RAMDrive or RAMLink (again with RAM-TOOLS) to a GEOS recognized device number if you wish to have these devices recognized during the boot process. GEOS recognizes devices numbering from 8 to 10. Alternatively, you could use the SWAP 8 or SWAP 9 functions on RAMLink to change the device number before booting gateWay.

You may also wish to change the default partition number to the number of the partition you wish to have the gateWay see when it is first booted, but if you don't, gateWay will automatically place you into the first partition it can find which matches the active RL driver being used.

Please note that in order for the gateWay to recognize the Foreign partition on RAMDrive or RAMLink as a form of system RAM expansion, you must choose YES when asked if you wish to install the RAMLink GEOS kernal patches during the gateWay installation procedure.

## **Combined RAM Systems**

If you intend to use the gateWay with a CMD RAMLink which is equipped with both a populated RAMCard and which also has some other form of RAM expansion (Commodore REU, Berkeley Softworks' GEORAM, or PPI RAMDrive) plugged into the RAM port, you may use the method given previously in 'RAMDrive and RAMLink Systems'. Please note that you must use that method if you have either a PPI RAMDrive alone or either a PPI RAMDrive or a Commodore 1700 with only 128K of RAM attached to the RAM port on RAMLink. We also highly recommend using that method with any combination of RAMLink and some other form of RAM expansion.

For those users who have a Commodore REU with at least 256K of RAM or a Berkeley Softworks GEORAM attached to the RAM port in RAMLink (but not a PPI RAMDrive) there is another possible choice - you may have two separate RAM devices for use under the gateWay. Users with a PPI RAMDrive and a Commodore REU plugged into a multi-port expansion board must use this method.

If you use this method with a RAMLink containing a separate RAM device in the RAM port we suggest that you use the RAM device attached to the RAM port as your main RAM disk - but the final decision as to how to configure your overall system is entirely up to you.

We feel that it is important to point out that when using your system configured as described in this

section, you will probably have more devices available to you than GEOS can handle at one time, which may cause some confusion to you.

For example, on a system with a 1541, 1581, RAMLink (with a 1 Mb RAMCard) and a Commodore 1750 REU, using this method yields four devices available under gateWay. How could you use such a system, when only three devices can be seen at one time? You might place the CBM1541, CBM1581, RamDisk, and RLDrive drivers on your boot disk, in that order; set the 1541 as device 8, the 1581 as device 9, and RAMLink as device 10. When you boot, RAMLink will not be visible. To activate it, double-click on the RLDrive driver (make sure you have a Native partition on RAMLink for the RLDrive driver to find). Now the RAMLink Native partition should appear as the third drive, taking the place of your REU. You may go back to the REU later by double-clicking on the RamDisk driver, but you will have to reformat it, losing its contents.

There are other ways to configure this same system, and you might try having RAMLink set as a device number which is out of range of GEOS, then use the SWAP button to swap it with one of the floppy drives. But there are times when SWAP cannot be used.

Finally, you might just decide it is easier not to use one of the floppy drives which you are used to having, in favor of having two RAM devices. This is probably the best solution, but you may need to copy your files that you have in that format to your other floppy drive, so that these will always be available without swapping drives.

*Important: Since GEOS itself cannot properly identify RAMDrive or RAMLink, it is very important that your RAMDrive or RAMLink default device number be set to a device number which will not interfere with normal operation. GEOS uses device numbers 8 through 11, so your RAMDrive or RAMLink should be set to device number 12 or higher whenever you use the standard GEOS system.*

### **Installation Procedure for Combined RAM Systems**

In order to operate gateWay from RAMDrive or RAMLink equipped systems, you must configure your RAMDrive or RAMLink unit in a specific manner. This configuration can be done either before or after creating your gateWay boot disk - but it must be done before attempting to boot the gateWay system. The instructions for configuring RAMLink and RAMDrive are at the end of the instructions for creating the boot disk. We recommend configuring after you have created a boot disk, and the time to do this is indicated in the procedure below.

- if you have a PPI RAMDrive and a Commodore REU combined through use of a multi-slot port expander, be sure that both are plugged into active slots and that the ENABLE/DISABLE switch on RAMDrive is in the ENABLE position. If you have not yet installed the RD-DOS, do so now. Also, be sure that the device number for RAMDrive is set to 12 or higher.
- if you have a CMD RAMLink with a RAM expander in the RAM port, be sure that the RAM expander is plugged into RAMLink and that RAMLink is plugged into the computer. Set the ENABLE/DISABLE switch on RAMLink to ENABLE, and set the NORMAL/DIRECT switch to the DIRECT position. Also, be sure that the device number for RAMLink is set to 12 or higher.
- turn on your 64 or 128 and boot GEOS as you would normally. Be sure to use an original, unmodified GEOS boot disk for booting. If you are using a GEORAM plugged into RAMLink then

you should boot with a GEORAM GEOS System disk. If you are using a Commodore REU plugged into RAMLink or in combination with a RAMDrive, then you should boot with a standard GEOS System disk.

- insert the gateWay System program disk into a drive and click on the disk icon representing that drive to open the gateWay System disk.
- from the menu bar, select disk. After the disk menu unfolds, click on validate. The deskTop will now validate your gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, insert a blank disk into the drive you intend to use for booting gateWay, and click on the disk icon for that drive.
- pull down the disk menu and select format. When the format dialog box appears, enter a name for your new gateWay boot disk and press the <RETURN> key (if you are creating a boot disk on a 1571 drive, be sure to select a single-sided format).
- when the format is complete, copy the following files from the gateWay System disk to the newly formatted disk.
  - GEOS (GEOS128)
  - GATEWAY (GATEWAY\_128)
  - LAUNCH (LAUNCH\_128)
  - MakeBoot64 (MakeBoot128)
- copy a disk driver for each different type of drive you will be using. Please note that the order in which these disk drivers appear on the boot disk is very important. Place drivers on your boot disk in the order in which the devices on your system are numbered. In other words, the driver for device number 8 should go on first, then the driver for device number 9, and finally, the driver for device number 10 (if two of your devices are of the same type, then only one driver is needed for these two devices). The following list shows which drivers are required for specific drive types:
  - CBM1541 (CBM1541\_128) - use with Commodore 1541 or 1541 compatible drives.
  - CBM1571 (CBM1571\_128) - use with Commodore 1571 or 1571 compatible drives.
  - CBM1581 (CBM1581\_128) - use with Commodore 1581 drives.
  - HardDrive (HardDrive\_128) - use with CMD HD Native Mode partitions (Note: you may only have one HD driver in an active position).
  - HD1581 (HD1581\_128) - use with CMD HD 1581 Emulation Mode partitions (Note: you may only have one HD driver in an active position).
  - GRamDisk (GRamDisk\_128) - use with a GEORAM containing from 512K to 2 Mb of RAM (Note: you may only have one RAM driver in an active position).
  - RamDisk (RamDisk\_128) - use with a RAM device containing 512K to 2 Mb of RAM (Note: you may only have one RAM driver in an active position).
  - Ram41\_71 (RamOld\_128) - use with a RAM device containing 256K of RAM or more, but may not be used with switcher (Note: you may only have one RAM driver in an active position).
  - RLDrive (RLDrive\_128) - use with PPI RAMDrive or CMD RAMLink Native Mode partitions (Note: you may only have one RL driver in an active position).
  - RL1581 (RL1581\_128) - use with PPI RAMDrive or CMD RAMLink 1581 Emulation Mode partitions (Note: you may only have one RL driver in an active position).

- if you are using a 256K REU or have placed the Ram41\_71 (or RamOld\_128) driver in an active position on your boot disk, then skip the next three steps concerning switcher - you will not be able to use it.
- if you booted your system using a standard GEOS System disk (not a GEORAM System disk), copy switcher.cbm (or switcher128.cbm) from the gateWay System disk to your new gateWay boot disk.
- if you booted your system using a GEORAM System disk, then copy switcher.bsw (or switcher128.bsw) from the gateWay System disk to your new gateWay boot disk.
- copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Be sure that the drivers you intend to use most are the first ones on the disk.
- open the new boot disk by clicking on the icon of the drive containing the new boot disk.
- double-click on the MakeBoot64 (or MakeBoot\_128) icon.
- after a few seconds, a dialog box will ask if you wish to install the RAMLink/GEOS kernal patches. Click on the NO button.

After a few moments, you should be back at the deskTop (gateWay may request that you re-insert a disk containing the GEOS deskTop). There will be a new file on your boot disk named GEOBOOT (or GEOBOOT128). The gateWay will always be booted from this disk. If you make dramatic changes to your system hardware later, you should create a new gateWay boot disk using the correct procedure for that system.

Turn your system off now. If you have not yet configured your RAMDrive or RAMLink for use with gateWay, then do so now, using the procedure given below. If you have already configured your RAMDrive or RAMLink, then go to the section titled, 'gateWay for the First Time'.

### **Configuring Combined RAM Systems for gateWay**

To configure for using the gateWay with a RAMDrive and REU system or a RAMLink and RAM expander system in DIRECT mode, use the RAM-TOOLS program provided with RAMDrive and RAMLink to create a Foreign (direct access or DACC) partition with a number of blocks equal to the size of the REU or RAM expander. This must be the first partition created, so delete all other partitions before creating this one.

Please note that part of the direct access partition will be used as a RAM disk by one of the three RAM drivers supplied with gateWay. The other part of that RAM is accessed by the GEOS and gateWay system software, and used to store system variables, disk drivers, and the inactive switcher task.

The following chart give the correct block count for different sizes of RAM expansion units. Use the correct block count for creating your direct access partition.



<b>RAM</b>	<b>Expander Description</b>	<b>Blocks</b>
256K	Commodore 1764	1024
512K	Commodore 1750 or Berkeley Softworks' GEORAM	2048
1 Mb	Expanded 17xx or GEORAM	4096
2 Mb	Expanded 17xx or GEORAM	8192

While the direct access partition must be the first partition created, it is not necessary for it to be assigned to partition number 1. In fact, it is much better to give it a partition number which will be out of the way. This avoids having it show up as the default partition if you forget to change your default partition number. We usually assign this partition number 31 when creating this partition.

If you have a RAMDrive or a RAMLink equipped with a populated RAMCard, you may also use 1581 or Native partitions created on these as separate RAM disks. If this is the case, then after you have created the direct access partition, you must create at least one 1581 or Native partition to use with GEOS. The gateWay provides two drivers for use with RAMDrive and RAMLink equipped systems - RLDrive and RL1581. RLDrive works with CMD Native partitions of any size, and RL1581 works with 1581 Emulation partitions. Either of these partition types may be used under the gateWay, and it is up to you to decide which type or types you desire to have available to you, and to create these with RAM-TOOLS.

You should change the default device number assigned to RAMDrive or RAMLink (again with RAM-TOOLS) to a GEOS recognized device number if you wish to have these devices recognized during the boot process. GEOS recognizes devices numbering from 8 to 10. Alternatively, you could use the SWAP 8 or SWAP 9 functions on RAMLink to change the device number before booting gateWay.

You may also wish to change the default partition number to the number of the partition you wish to have the gateWay see when it is first booted, but if you don't, gateWay will automatically place you into the first partition it can find which matches the active RL driver being used.

Please note that to keep the gateWay from recognizing the Foreign partition as a form of RAMLink or RAMDrive system RAM expansion, you must choose NO when asked if you wish to install the RAMLink GEOS kernal patches during the gateWay installation procedure.

## gateWay For the First Time

You are now ready to boot the gateWay. Place your new boot disk in the appropriate disk drive, and boot the gateWay.

For gateWay 64, enter:

```
LOAD"GEOS", 8, 1
```

For gateWay 128, enter:

```
RUN"GEOS128", 08
```

Now press the RETURN key to start the load process.

You can actually boot the gateWay from any GEOS supported device number (8, 9 or 10) by changing the "8" in the above LOAD and RUN statements to the appropriate device number.

If you are booting from a floppy device on a C64, you may notice that the initial loading process will be a bit slower than usual. This is because the boot process does not use the GEOS diskTurbo routines. Users who have JiffyDOS, or are loading from hard drives or RAM systems will not notice the lack of the diskTurbo routines in the loading process. The diskTurbo will become active after the GEOBOOT file has been loaded.

You will notice some new things happening during the boot process. The first thing that you see is the 'Welcome to the GATEWAY...' screen message. At the bottom of the screen, driver icons will appear as they are loaded into the system. For example, the icon of your printer and input will driver will appear followed by your disk drivers, and finally by the switcher icon (if you have moved it over to your boot disk).

At this point, you will be brought out to the gateWay. This first time only, you might want or need to configure certain features of the gateWay before you start copying it over to other disks. Certain settings, such as screen color, and pad pattern are stored in the gateWay itself. Adjusting these options is described later in this manual under 'Configuring the gateWay'.

### What could go wrong?

If something goes wrong while creating a boot disk for the gateWay system, you may find that your boot disk will not complete the start up process. The following paragraphs should help find such problems.

Wrong version of GEOS - The gateWay is specifically for use with GEOS v2.0, GEOS 2.0r, GEOS 128 v2.0 and GEOS 128 v2.0r. Trying to make a gateWay boot disk with earlier versions GEOS will not produce a usable system disk. Always use the correct version of GEOS for the type of RAM expansion involved (GEORAM users must use 'r' versions of GEOS).

Boot disk not formatted correctly - When creating a boot disk, always FORMAT the disk first using the format option in GEOS - simply erasing the contents of the disk may not lead to a workable boot disk. If you are creating your boot disk on a 1571, confirm that the disk is formatted as single-sided.

System created using a modified GEOS disk - NEVER use a modified GEOS system disk for booting when creating a new gateWay boot disk. Since gateWay itself patches the GEOS kernel, changes made by other boot disk creation systems, serial number removal systems, auto-execs, or modified CONFIGURE files may create incompatibilities.

Disk drivers in the wrong order - Always place your disk drivers on the boot disk in the same order that your drives will be numbered when booting the system.

Multiple disk drivers for a single device - You cannot have two separate disk drivers for a particular device in active positions on a boot disk (the first three drivers are active on RAM expanded systems). Specifically, you may have RLDrive or RL1581, but not both, in active positions. The same situation applies to RamDisk, GRamDisk and Ram41\_71 (or RamOld\_128).

Auto-exec on boot disk - Some popular auto-exec programs are not compatible with the gateWay. Never place any extra files of this type on your boot disk until you are sure that the boot disk operates properly.

Defective RAM expansion - The RAM tests done by gateWay are more thorough than the standard GEOS RAM tests. It is possible that a defective RAM unit will work with GEOS, and you may never experience the condition in which the RAM fails. Yet, the same RAM expansion unit might fail the gateWay RAM test and cause boot failure. Try to boot without RAM expansion to verify if this problem exists.

## **Making Additional Boot Disks**

To make additional boot disks, simply copy all of the files from the first boot disk you made onto another formatted disk. If this disk is of a different type, you may wish to place disk drivers in a different order than they were on your original boot disk.

You may also wish to make a separate boot disk if you often use a different type of input device - remember that the input device driver located first on the boot disk will determine which input driver must be used with that disk, unless you enter the control panel and change the selected input driver. To make this change, you must use the input device associated with the currently active input device driver.

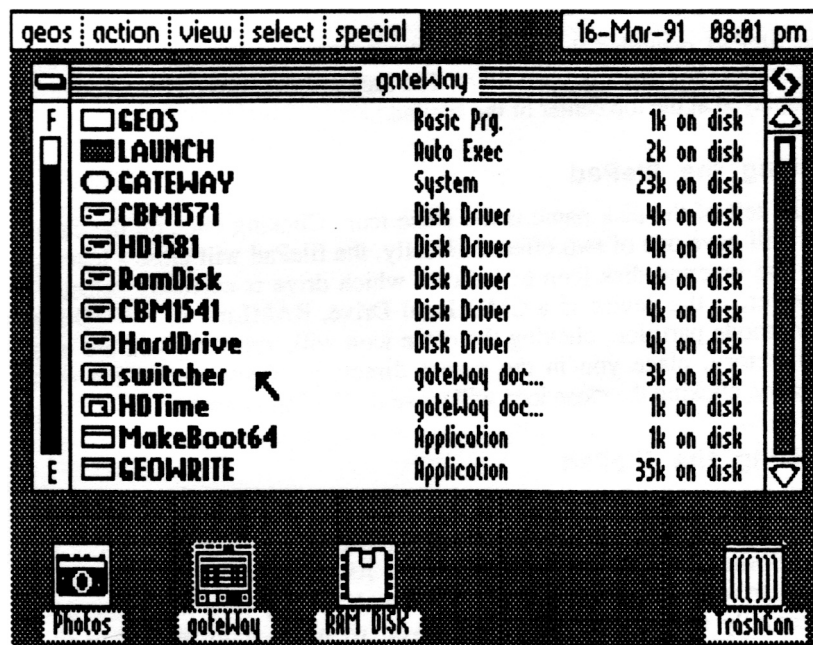
## Section 3 gateWay Functions

### Main Features and Functions

The gateWay allows you easy access to your files and simplifies file management on multiple-drive systems. From the gateWay, you will be able to do everything you were accustomed to doing from the deskTop. This section describes many of the gateWay's advanced file management features.

### The gateWay Screen

Along the top of the gateWay screen lies the menu - to the right of the menu is the clock. Across the bottom of the screen are the drive icons and, at the far right, the TrashCan.



The gateWay

### Pulling Down a Menu

To pull a menu down, place the pointer over the menu you wish to pull down, and click once. Clicking is accomplished by pressing a joystick fire button or a left mouse button once, then immediately releasing it. The options for that menu will then 'drop down' and will be available for selection.

### Selecting a Menu Item

After pulling down a menu, you may select one of the menu items by moving the pointer until it rests over the desired menu item. Click once to complete the selection process.

## **Selecting a Drive**

Drives may be selected by clicking on any of the drives by moving the pointer until it is positioned over the drive icon, then clicking once. While a drive is selected, its icon appears in reverse video.

## **The filePad**

The filePad occupies the center of the screen. It contains information concerning the currently open drive. The name of the currently opened disk is displayed at the top center of the filePad.

## **Closing the filePad**

To the left of the disk name is the close icon. Clicking once on the close icon will have one of two effects. Usually, the filePad will close - leaving only the inverted disk icon to indicate which drive is currently selected. However, if the device is a CMD Hard Drive, RAMLink or RAMDrive native mode partition, clicking the close icon will, assuming you are in a subdirectory, place you in the parent directory. If you are in the root directory, clicking the close icon will close the filePad as above.

## **Resizing the filePad**

To the right of the disk name, is the resize icon. Clicking once on this icon allows the file pad to be resized to your liking - displaying as much or as little information about the file as you wish. After you have clicked once on the resize icon, a vertical line will appear. You may then move the line horizontally until it is located where you wish the right margin of the filePad to be moved to. Click once more to complete the process. The filePad will automatically redraw itself using the new margin you have set.

## **The Fuel Gauge**

Below the close icon and extending the height of the filePad is a fuel gauge. The gauge allows a quick assessment of the space available on the disk. Occasionally, more accurate information might be required. Clicking on the fuel gauge, will bring up an info box describing the disk - from drive type (1541, RAM DISK, 1581 etc.), to when the disk was initially formatted - and of course, the size of the device, the number of blocks free and used.

## **Viewing Files on the filePad**

Below the resize icon, is the slider. The slider allows quick access to any file on the disk. Simply click on the slider and move it up or down. Click again to deposit the slider. The directory listing has been moved up or down in accordance with the slider movement. Below and above the slider are scroll arrows which are used to scroll the directory up or down one line at a time. This may also be accomplished by using the cursor up/down key. Clicking above or below the slider icon in the slider region, will move the listing up or down a full page. The cursor left/right key has been programmed to mimic this action. The filePad page will displays up to 12 entries at a time.

## **Selecting Files from the filePad**

Before you can perform an action on a file, generally, you must select it. This is done by clicking in the filename region for that file. The filename region for that file is then inverted. To select multiple files, hold down the Commodore key and click on additional filename regions. The scroll icons and slider can be used to facilitate moving to other parts of the directory.

To deselect a file, click anywhere outside the filename region. If multiple files are selected, you may deselect a file by clicking again in the filename region while keeping the Commodore key pressed.

Making the process of selection easier is the select menu. From this menu, you can either select all or select page. Selecting all, will select every file on the disk. Selecting page, will select the page. In either case, the filePad will be inverted. Clicking on the filePad will then attach the MultiFile icon to the pointer.

To deselect at this point, just click anywhere outside the filePad.

## **Filetype Icons**

To the left of filename region is a small icon. This is the filetype icon and it is meant to inform you at a glance as to the class of the file. Clicking on the filetype icon will bring up an info box, displaying the file icon and various other information. Clicking on the file icon closes the info box.

## **Moving Files On the filePad**

For a variety of reasons, it is often necessary to rearrange files with the directory. You might be doing this for thematic reasons, i.e., grouping all your applications together, or in order to access a data file or font from within an application.

To move a file on the Pad:

- while holding down the C=, click on the filetype icon to the left of the filename region. A small icon will become attached to the pointer.
- move the icon to the position in the directory you want the file to occupy. Click again.
- one of two things will happen:
  - a. if there is a free directory slot preceding the file entry, the file will be moved to that position
  - b. if there is no free directory slot, the files will be swapped.
- if you decide you do not want to move the file, simply redeposit the file in its old slot.
- to facilitate moving files beyond the range visible on the filePad, the up and down scroll keys will move the directory one listing at a time.

## **The TrashCan**

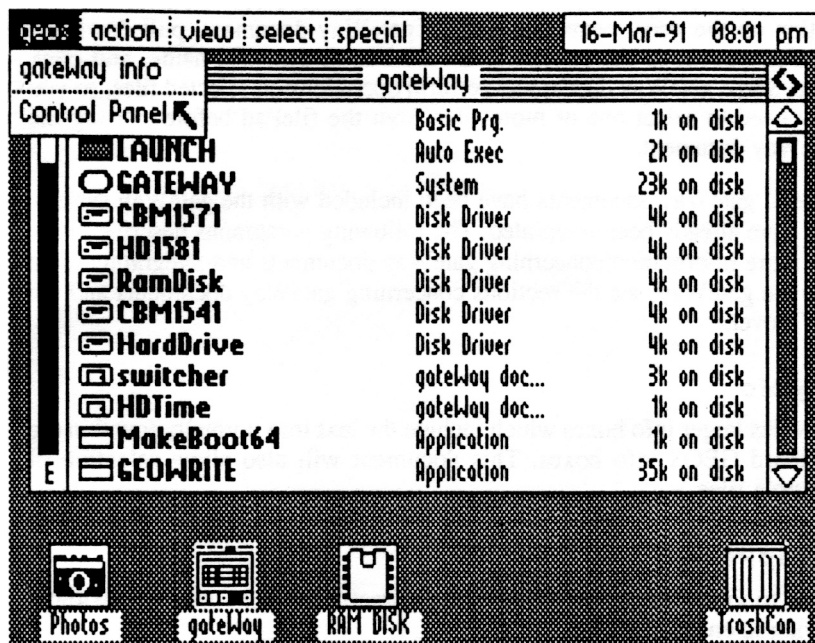
The TrashCan appears at the bottom of the screen, to the far right. Files which are no longer needed can be dropped into the trash, erasing the file from the disk. After files have been placed into the TrashCan, they may be restored back to their normal condition up until another disk is opened.

Whenever files are located in the TrashCan, clicking once on the TrashCan icon will cause it to invert, indicating that it has been selected. The filePad of the currently opened disk will change status, displaying only the names of those files which have been dropped into the trash. Double clicking on the filename region of a file will restore the file, placing its name back into the normal disk directory.

If you have files in the trashcan, most any disk related function will empty the TrashCan. The main intention of the new TrashCan is to allow immediate retrieval of one or more files which were mistakenly erased.

## The Geos Menu

The first item listed under the geos menu will differ, depending on which version of the gateWay (and GEOS) you are using. The geos menu is mainly intended as a means for accessing gateWay documents, but also contains options for getting info about the gateWay, accessing the control panel, and in the case of the 128 version, an option for switching between 40 and 80 column modes.



The Geos Menu

## Changing Screen Modes

In 128 mode only, the first option on the geos menu is the 40/80 switch option. Selecting this option will allow you to switch between 40 and 80 column screen modes. Obviously, you must have a monitor and cables which support both of these modes in order to use this option. A dialog box will request if you wish to switch modes.

## Getting Info About The GateWay

The first item on the menu in gateWay 64, and the second item on the menu in gateWay 128, is gateway info. This presents the name of the author and copyright message.

## **Accessing The Control Panel**

The control panel is a special gateWay document which contains the controls to allow you to configure the gateWay to your individual tastes. More information concerning the control panel can be found in a later section 'Configuring the gateWay'.

## **Selecting GateWay Documents**

If you use the GWMover to integrate gateWay documents into a copy of the gateWay, those gateWay documents will show up below the control panel option on the geos menu. To select a gateWay document, pull down the geos menu, move the pointer to the desired document's name, and click once. Some gateWay documents perform operations on selected files, so you may need to select one or more files from the filePad before starting the gateWay document.

Several gateWay documents have been included with the gateWay system, and have already been integrated. The following paragraphs describe these. For more information concerning gateWay documents and integrating them into the gateWay, see the sections concerning gateWay documents and the GWMover.

### **BigInfo**

Provides larger info boxes which include the text info normally found in the standard GEOS info boxes. This document will also allow selection of multiple files.

### **ScrapPeek**

Used to view the current Photo Scrap directly from the gateWay without having to enter geoPaint.

### **MakeDir**

Allows creation of Native Mode subdirectories from within the gateWay on systems using the HardDrive or RLDrive disk drivers with the CMD HD, CMD RAMLink and PPI RAMDrive.

### **HDTime**

Grabs the current time and date from the CMD HD real time clock, and updates the GEOS time clock.

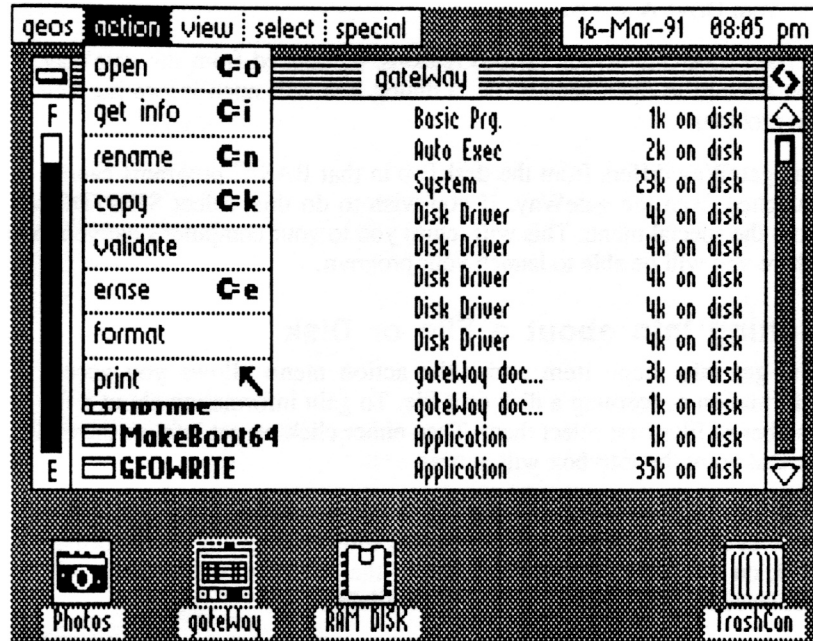
### **Touch**

Touch allows you to update the date stamp to the current date and time on any selected files on the filePad. If no files are selected, then the date stamp on the disk in the currently active drive is updated instead.



## The Action Menu

With the gateWay, a wide variety of actions can be performed on the files of a disk. Files and groups of files can be selected copied, renamed, rearranged and printed. Similarly, disks can be renamed, copied, erased and formatted.



The Action Menu

Most of these actions are carried out through the action menu item. Unlike the disk/file menu mechanism of the deskTop, the action menu of the gateWay offers much the same utility through its duality. If a file is selected when an action is requested, the gateWay assumes that the file is the object of the action. However, if no file is selected, then the gateWay assumes that the disk itself is to be the object. For example, selecting action rename while a file is selected will rename the file. However, if no file is selected, the disk will be renamed.

## Opening Files

To open a file, select the file you wish to open, pull down the action menu, and select open. You may also double click in the filename region of a file to open it. If a data file, the application will be sought out and launched as well.

It is important to note that the gateWay will generally autoswap applications launched from Drive C into either the Drive A or Drive B slot. There are, however, two occasions on which the gateWay will not do this. If a flag is set in the application's header, the gateWay will assume that the application can handle a three drive system. If a data file is launched from Drive A or B and its application is on Drive C, the application will not autoswap. The application will, internally, have access to Drive C, but will run from Drive A and B.

Certain files cannot, for various reasons, be opened from the gateWay. If you attempt to open such a

file, a dialog box will open informing you of the problem.

The gateWay differs from the deskTop in that BASIC programs cannot be launched from the gateWay. If you wish to do this, select SHUTDOWN from the special menu. This will return you to your computer's native mode where you will be able to launch your program.

### **Getting Info about a File or Disk**

The get info menu item under the action menu allows you access to information concerning a disk or a file. To gain information about a file or number of files first select them. Then either click on get info, or press C=i. At that point the info box will appear.

Note the file icon and its name to the right of that icon. The file icon doubles as a close icon. When you are finished viewing the information, click on the icon. At that point, either the next file in the queue will be displayed or, you will be returned to the filePad.

There is a short cut to viewing a file's info box. Click on the filetype icon to the left of the filename region. This will bring up the file info.

Selecting get info when you have not selected a filename will bring up the disk info. This will include the drive type, the size of the disk, the number of blocks free and used as well as the date the disk was formatted.

This will also display the disk's icon. Under the gateWay a disk's icon is user selectable. Simply select a file from the filePad. Then, from under the special menu, select set disk icon. The disk icon becomes that of the selected file.

### **Renaming Files or Disks**

A filename can be altered or changed using the action rename menu item.

To rename a file:

- select the file or files
- select rename from the action menu
- a dialog box will then appear prompting you for a new filename. The new name must be unique and not more than 16 characters in length. Use the backspace key to delete the old file name.
- press the RETURN key
- if you should decide not to rename the file, click on CANCEL.

If you are renaming more than one file, the next file in the queue will then be presented.

Occasionally, it may be that after entering a new filename, the dialog box will reappear asking you to rename the file. This occurs because a file on the disk already has that name. Choose another name and continue.

To rename a disk:

- without a file selected, select rename from the action menu.
- a dialog box will then appear prompting you for a new disk name. The new name must be not more than 18 characters in length. Use the backspace key to delete the old file name.
- if you should decide not to rename the disk, click on cancel.

## **Copying Files or Disks**

The methods for copying a file or files from one disk to another vary. Unlike the deskTop, you are able to immediately copy from and to Drive C without having to swap the drive in.

To copy a file from one disk to another:

- select the file by clicking on it. Pause then click again. The file icon will then become attached to the pointer. Simply move the pointer and icon over to the drive you wish to copy to and click again.
- at that point the copy process will begin immediately.
- a status box will appear indicating the name of the file being copied and the number of file yet to be copied.
- multiple files can be selected and copied to another disk in the same fashion.
- if the file exists at the destination, a dialog box will open informing you of that fact. At that moment you can choose to replace the file or CANCEL. In group select mode the next file in the queue is then copied.

To copy a disk to another disk:

There is no true disk copy supported by the gateWay, however, to copy all the files from one disk to another, click on select all. This will select each file on the disk. Clicking on the filePad will then attach the multifile icon to the pointer. Move it to the destination disk and click again. The copy process will start immediately. As above, the copy status box will keep you informed as to which file is currently being copied and of the number of files remaining to be copied. That is the only method of copying files to or from Drive C.

From Drive A or B, you can alternatively click on action copy with no files selected. This will automatically select all files on the disk and begin the copy process. It is important to note that Drive A will copy to Drive B, that Drive B will copy to Drive A.

Note: the copy menu item requires at least two drives. On one drive systems, the copy menu item is disabled.

## **Validating Disks**

The validate option is used to make sure that the storage space for all files on the disk is properly allocated. It is generally wise to validate a new disk you have received (which contains GEOS files) to make sure that it contains no errors. You should also validate any disk which you have removed from a drive without first emptying the TrashCan - this will allow you to reclaim any blocks which may have

been allocated to files which were placed in the trash, either through the erase feature or directly.

## **Erasing Files or Disks**

A file or group of files is deleted by placing them in the trash can or by selecting the action erase menu item. Each file you place in the TrashCan remains there until you open a new disk, open a file, or validate the disk. Any of those actions will empty the trash.

To erase a file:

- select the file or files to be erased.
- drag the file icon or multifile icon to the TrashCan and click
- if you are erasing more than one file, a dialogue box will open to confirm your choice. Click on OKAY to continue
- alternatively, you may select the file(s) to be erased then select erase from the action menu. The file(s) will then be moved to the TrashCan.
- Note that the number of blocks free and used will not change until the TrashCan is emptied. This can be accomplished by opening another disk, or selecting empty trash from the special menu. Once the trash is emptied, the files cannot be recovered.

## **Undoing The Trash**

Once there are files in the TrashCan, it can be opened like a regular disk. Simply click on the TrashCan and the files deposited there earlier will be displayed.

- to undelete a file simply double click in the filename region. The file will then be moved back into the filePad directory.

## **Erasing Disks**

This feature is useful when you want to erase all the files on a disk. Erasing can be much faster than a multiple file delete, or formatting.

To erase a disk:

- open the disk whose contents you wish to erase.
- with no files selected, select erase from action erase
- a dialogue box will open confirming you attention to erase the disk. Click on OK to continue.
- after a short pause, the disk will be erased and the filePad reopened.

## **Formatting Disks**

Before a disk can be used, it must be formatted. Note that formatting will destroy everything on the disk. For that reason, check a disk carefully before you format it.

To format a disk:

- select action format
- a dialog box will open asking you to insert a disk to be formatted and to enter a name for it.
- enter a disk name and hit return. Clicking on cancel will abort the action.
- alternatively, to format a 3.5 inch disk, open a unformatted 3.5 in disk.
- the gateWay will inform you that disk is unreadable and ask whether to format it
- enter a disk name as above, or click on cancel.

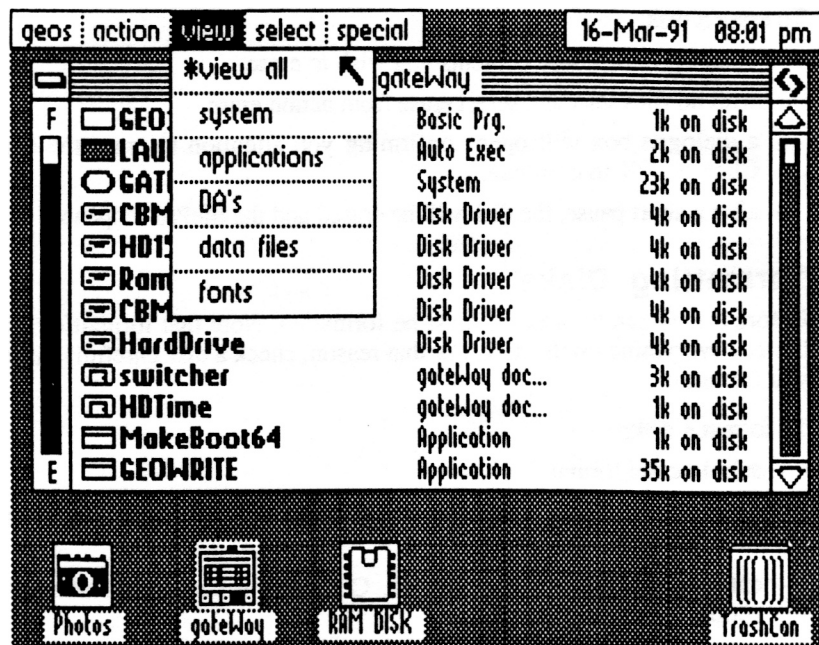
It is important to note that the gateWay will ask whether to format any seriously damaged disk it might find. Either click on OKAY or CANCEL to continue.

## Printing Documents

Documents can be printed from the gateWay or from within the document's application. This assumes the correct printer driver is on the disk. Pulling down the action menu will confirm this. If the word print is not in italic, then the printer driver is present and the printing job can go ahead. In order to print the document, first select the file, then select action print. Printing will begin momentarily. There is no multiple file select for this action.

## The View Menu

With the gateWay, you can choose which type of file you want to view. You can view by application, data file, font etc. This advantage makes file management easier by allowing you to perform actions on classes of files.



The View Menu

To view only data files on a cluttered disk, select data files from the view menu. The only files then displayed on the filePad are data files. Any action now selected from the action menu will only be

performed on those files.

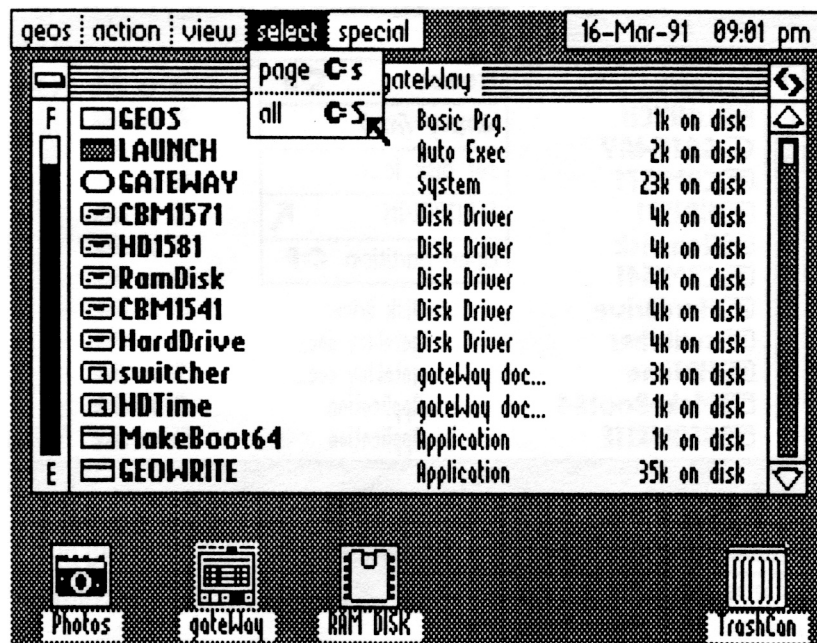
From the view menu you can choose to view by:

- view all: the default view mode - displays all files
- system: these are system files like the gateWay.
- applications: like geoWrite
- desk accessories: like the calculator
- data files: these are those files created by applications
- fonts

The gateWay "remembers" your view type from session to session. The view type can be confirmed by pulling down the view menu. The active view type is marked by an asterisk.

## The Select Menu

This menu contains options which allow you to easily perform two standard multiple file selections. These selection methods can be used with many of the options contained on the action menu, and are also usable by some gateWay documents.



The Select Menu

### Selecting Page Files

This option will allow you to select all of the files currently viewable in the displayed on the filePad. Only those files which can currently be seen on filePad will be selected.

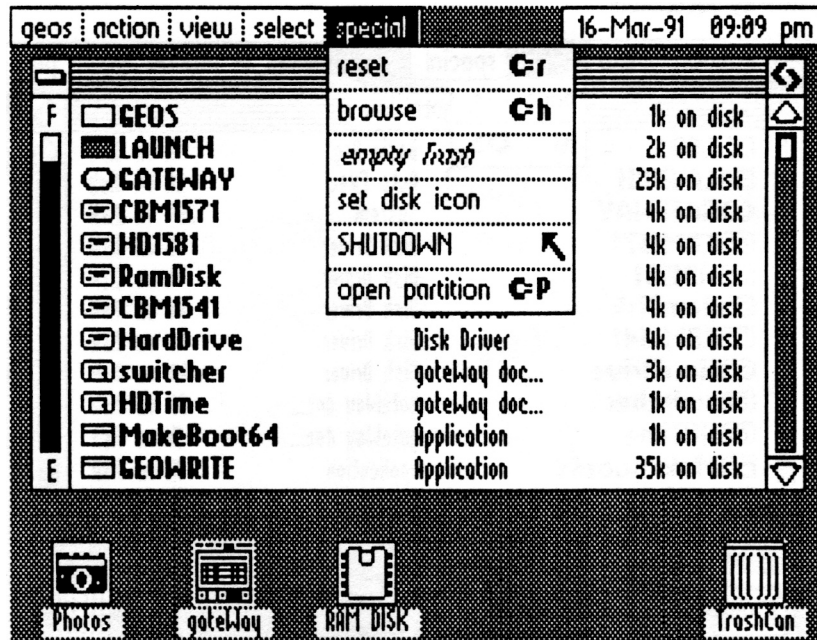
### Selecting All Files

This option allows you to select all files contained within the filePad's directory. If you you have a

particular view mode established, only those files which match the view criteria are selected. Using this method makes it easy to copy all of your font files or desk accessories, etc., to another disk.

## The Special Menu

The special menu contains a number of options which are unique to the gateWay. These features are part of what make gateWay special, and since most of them have little to do with performing an action on a selected item (the exception being the set disk icon option), this menu was created especially to help clarify the special nature of the options included on it.



The Special Menu

### Resetting the gateWay

This option reinitializes the gateWay, which causes it to reconfigure according to the parameters located in the current gateWay disk. This feature can be useful if you find yourself at the gateWay and one of your drives have disappeared, or if you have exited from an application to a disk which has no gateWay on it. Simply insert a disk with the gateWay on it into the current drive, and select this option.

### Browsing for Files

The browse feature will allow you to search for the first filename on a disk which matches the pattern criteria entered into the browse dialog box. When you select this item, you will be presented with a dialog box requesting what you wish to browse for. You may enter either a specific filename, or you may use an asterisk at the end of a string to find the first file that matches all of the characters before the asterisk.

## **Emptying the TrashCan**

If you have placed files from the filePad into the TrashCan, and have not changed drives or disks since doing so, you can permanently delete these files from the TrashCan by selecting this option. This should always be done before removing a disk, to make sure that the blocks used by deleted files have been reclaimed. If you forget to do this before removing a disk, you should validate that disk when you wish to reclaim the unused blocks.

This option will be in italics if there is no trash in the TrashCan.

## **Changing a Disk's Icon**

By using this option, you may assign any file's icon to a disk. This is a permanent change, and that disk will always appear with the icon you have assigned to it until you assign it a new icon with this option. To assign an icon to a disk, open the disk by clicking on it's icon, select a file icon to assign to the disk by clicking once in the filename region of the file which has the icon you wish to assign to the disk, pull down the special menu, and select the set disk icon option. After a couple of seconds, the new icon will appear where the drive icon used to be.

## **Shutting Down the System**

Anytime you wish to turn off your computer after using the gateWay, or if you wish to exit from the gateWay to BASIC, you should use the SHUTDOWN option from the special menu. This will insure that the TrashCan for the currently active drive has been properly emptied, and will then exit to BASIC.

## **Opening Partitions on CMD Devices**

Users of CMD's HD Series hard drive, RAMLink, or PPI's RAMDrive, can use this option to quickly switch from one partition to another with either CMD Native or 1581 Emulation Mode partitions. When this option is selected, a new filePad will open, showing the partitions available for selection. Only partitions of the type currently in use on that drive will be shown.

This means that if you are currently using a Native Mode disk driver (HardDrive or RLDrive), only Native Mode partitions will be shown, and if you are using a 1581 Emulation driver type (HD1581 or RL1581), then only 1581 Emulation partitions will be shown.

This option will be in italics if you are not using a supported device or driver at the time.

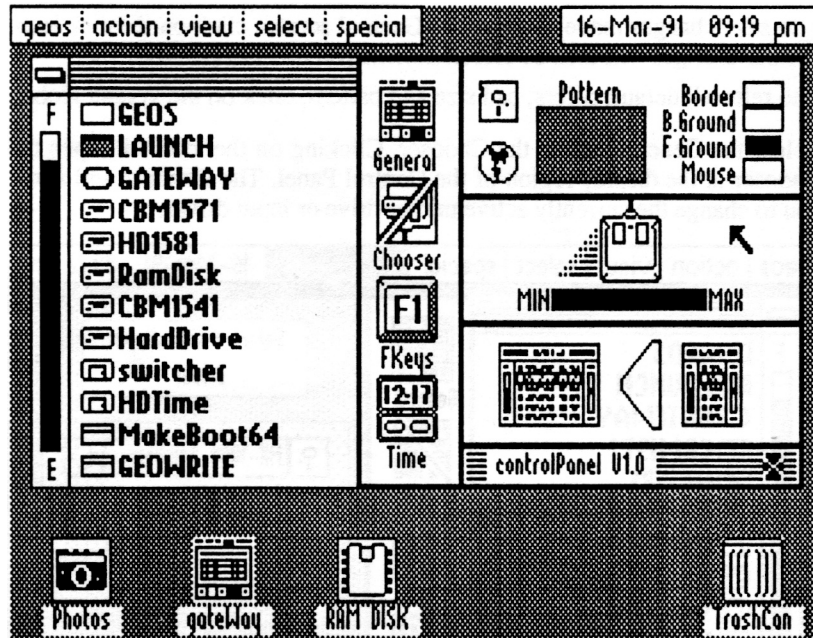


## Section 4

# gateWay Configuration

### Configuring the gateWay

Configuring the gateWay is accomplished through the Control Panel. The Control Panel is available at all times under the geos menu item. Click on Control Panel. Immediately, on the right side of the screen, the Control Panel will appear. Please note that the Control Panel works in both 40 and 80 column modes in gateWay 128.



The Control Panel General Settings Area

The Control Panel is divided into two regions. To the left of the Control Panel and arrayed down its height are four icons which represent the configurable items. Each of those items can be thought of as a separate room or region. The first of these is the General controls area.

Immediately to the right of the icons is the display region. Clicking on each of the four icons will bring up a different set of options in the display region. The General options will always appear to the right of the icons in the display region when the Control Panel is opened.

### Altering the gateWay presentation settings

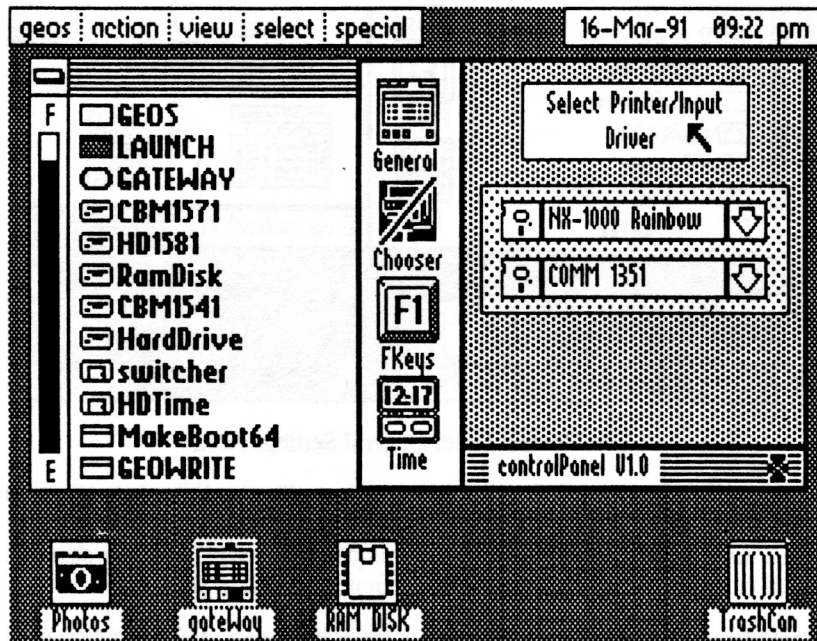
From General, you can change the gateWay pattern, as well as set the border, background, foreground and pointer colors. Changing the default mouse speed is as easy as clicking on the speed bar. Lastly, the default filePad size can be set by clicking on either the large or small pad.

- to change the pattern click on the pattern box. The pattern will change to reflect the next system pattern. The gateWay sports an additional, this is the gateWay pattern.
- to change any color set, click in the appropriate box, the color will be incremented to the next in

the list.

- to save changes made while at the General screen, click on the disk icon. Your changes will then be effected when you exit the Control Panel.
- to reinstall default colors, pad size and pattern, click on the system globe.

Below the General icon is the Chooser. Clicking on the icon will open the Chooser in the display region of the Control Panel. The Chooser will allow you to change the currently active printer drive or input driver.



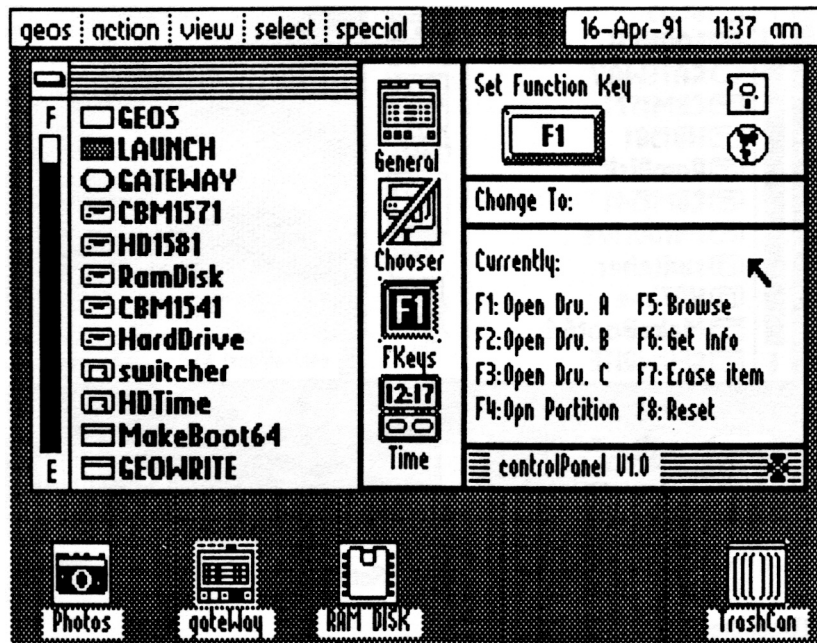
The Chooser

To change your printer driver:

- click on the down arrow, the next printer driver will appear.
- to select this printer driver, click on the disk icon. This will set the current printer driver to the one displayed.
- this change is only for the session. The next time you boot GEOS, the printer driver on you boot disk will be the active driver.
- to change your printer driver permanently, replace the printer driver on your boot disk with the new one.

To change your input driver:

- click on the down arrow, the next input driver will appear.
- to select this input driver driver, click on the disk icon. This will set the current input driver to the one displayed.
- this change is only for the session. The next time you boot GEOS, the input driver on you boot disk will be the active driver.
- to change your input driver permanently, replace the input driver on your boot disk with the new one.



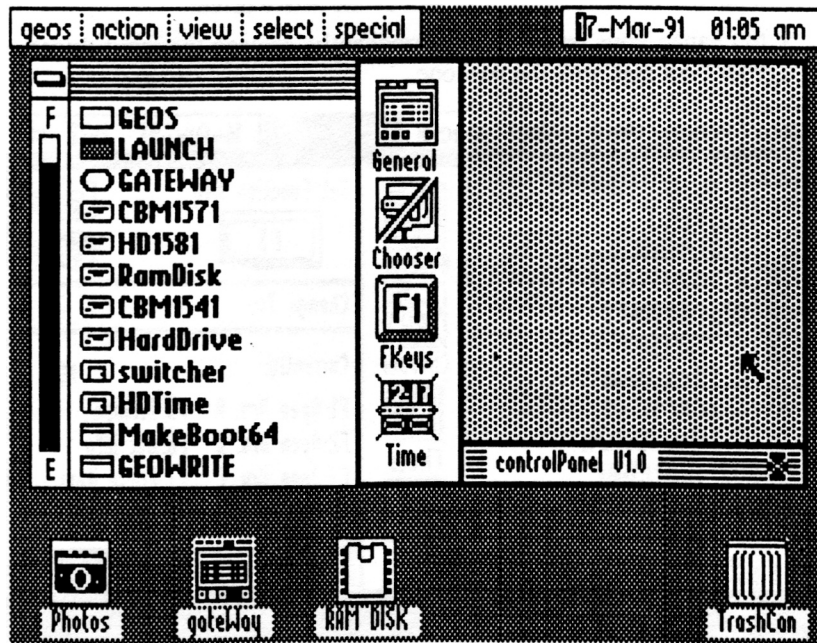
The FKey Definer

Below the Chooser, you will find FKeys. FKeys allows you to set the 8 functions to often used C= shortcuts. When first opened, FKeys displays the current function key settings. The first time you boot, these will be set to the defaults.

To alter a function key:

- press the function key you wish to modify. The displayed function key will change, reflecting your choice.
- press the C= shortcut sequence you wish the function key to have. The 'Change To:' information area will reflect the new assignment.
- to save your settings, click on the disk icon.
- to reassert the defaults at any time, click on the system globe.

Lastly, the Control Panel allows you to set the date and time. You will need to set the time and date each time you enter the GEOS. Fortunately, this is made easy by the gateWay.



The Time Setter

To set the time and date:

- select Time and a cursor will appear in the clock region of the gateWay.
- type in the current date and time.
- press return when you are finished setting the time and date. The pointer will reappear and you will be able to exit the Control Panel or enter another region.

If you own a CMD HD, the time and date will be uploaded automatically from the Hard Drive each time you boot.

To exit the Control Panel, click on the close icon in the lower left hand corner. You will be taken back out the gateWay. For users with RAM expansion, feel free to copy the gateWay to your other disks. For those without, please read the section concerning the GWMover before you proceed.

## gateWay Disk Drivers

The gateWay has taken a new approach to disk drives under GEOS. Under the deskTop, only 3 drive formats were supported: the 1541, 1571, and 1581, even the RAM Disk is a variation on one of these formats. Part of the reason for this was that drive support was built directly into the deskTop - the deskTop needed specific information about the disk devices it supported. Without this information, it is impossible for the deskTop to support the device.

This created problems, ironically, with RAM expansion. Users with 512K of RAM expansion find that only 331k is available as a RAM DISK. Now with the advent of 2 Meg REU's, of RAMDrive and RAMLink certainly, a larger capacity RAM device needs to be supported. Of course, we've done that.

Better RAM support is possible because the gateWay handles storage devices in a strictly legal fashion. Nothing is assumed known about the device, not the capacity of the device, the location of its BAM, the track and sector layout. Consequently, the gateWay deals with disk devices in two distinct fashions. The first of these is through the disk driver and GEOS kernel. actions such as renaming a file, deleting a file, or simply opening a disk can be handled in this fashion.

However, certain other device management functions are unavailable via these resources. For example, there is no format function available through GEOS. In order to accomplish this, the gateWay accesses the device directly.

Devices which do not support the Commodore DOS command group cannot be formatted or validated. In both of these cases, the DOS command is issued first, then the gateWay finishes. In the case of a format, the GEOS format string and off page directory is written out. With a validate, the header block and VLIR records are validated.

The gateWay handles drives without CONFIGURE. LAUNCH and a group of other programs have replaced it. This group of files are called disk drivers. Each disk driver supports a specific device - for example the CBM1541 driver supports the 1541. Whether you own a RAM expansion device or not, these files need only be on your boot disk.

In all, ten disk drivers are supplied with the gateWay:

- CBM1541 for the Commodore 1541 (165K)
- CBM1571 for the Commodore 1571 (331K)
- CBM1581 for the Commodore 1581 (790K)
- HardDrive for CMD HD Native Mode partitions (up to 16 Mb)
- HD1581 for CMD HD 1581 partitions (790K)
- RLDrive for RAMLink or RAMDrive Native Mode partitions (up to 16Mb)
- RL1581 for RAMLink or RAMDrive 1581 partitions (790K)
- RamDisk for Commodore 17xx series REU and GEORAM (up to 2 Mb)
- GRamDisk for GEORAM (up to 2 Mb)
- Ram41\_71 supports the smaller capacity RAM 1541, RAM 1571 RAM devices

Note: All gateWay 128 versions of these drivers are identified by the suffix "\_128" except Ram41\_71 which is called RamOld\_128.

## **Changing Drives**

If you are using a RAM expanded system, it is possible to replace a drive on the system with a drive of a different type. To do this, activate some other drive on the system which has a disk containing a copy of the disk driver for the drive type you wish to add to the system. Now turn off the drive you wish to remove from the system and perform a warm reset (select reset from the special menu or hold down the Commodore key and press the 'r' key). Now turn on the drive you wish to add to the system - it must have the same device number as the drive which you have removed. Double-click on the appropriate disk driver to activate the drive on the system.

## **Integrating Disk Drivers**

Before the gateWay can access a storage device, it must first be mounted. This is generally achieved by double clicking on the disk driver, or alternatively, by highlighting the desired driver and selecting action open. If you want the device to mount on boot up, its disk driver must be one of the first three disk drivers on your boot disk.

If you have RAM expansion, the disk drivers are stored in the expansion RAM. If, however, you wish to use more than one drive, and do not have RAM expansion, it will be necessary for gateWay 64 owners to integrate your device drivers into the gateWay. This is done with the Integrator, an auto-exec file supplied with the gateWay.

Make sure that the Integrator is on your boot disk the first time you boot the gateWay, and that the drivers for the device types you wish to use are the first two drivers on your boot disk. Once the gateWay has started, the Integrator will automatically integrates these device drivers directly into your gateWay. This copy of the gateWay then will need to be on every disk you intend to access. Later, if you change one of the drives on your system for one of a different format, change the order of the drivers on your boot disk, and the Integrator will sense the change, and reintegrate the proper drivers. As well, if at a later date, you purchase some form of RAM expansion, the Integrator will strip the drivers from the gateWay. Again, this will happen automatically - sensing the presence of RAM expansion, the Integrator will strip out any drivers it finds.

Note: If you have RAM expansion, you do not need the Integrator - in fact with the exception noted above, the Integrator will do nothing on RAM expanded systems other than return you to the gateWay.

## **Configuring RAM Expansion**

Recognizing the new capacity RAM expansion alternatives, we have developed a new RAM DISK driver - one that takes full advantage of all RAM expansion that might be present. It formats out all expansion RAM as a RAM DISK. A 1750 REU for examples now offers a 384K RAM DISK. A special control panel allows the RAM DISK to be configured.

To configure the RAM DISK:

- opening RamDisk or GRamDisk, the control panel will appear.
- click on the A, B or C icon to install at that address
- clicking the down arrow will set the size of the RAM DISK, the size indicator wraps around when it reaches the lowest allowable size
- click on SAVE to remember the configuration.
- click either of the close icons to return to the gateWay.
- or click on format to install the drive.

The new RAM DISK driver offers a new feature - before the RAM DISK is mounted a check is performed to determine whether the device is formatted. If so, the device is not reformatted, and its contents are left intact. However, a format can be forced from the configuration window by clicking on format.

In all but the 1764 REU, two 64K banks of expansion memory are allocated to the system - one to GEOS. The other is allocated to the switcher - the gateWay task switching mechanism. The gateWay will only allocate the first 64K bank for GEOS on REU's with 256K.

Also for those with only 256K (Commodore 1764) of RAM expansion, the Ram41\_71 driver has been provided. This driver creates a RAM 1541 with a capacity of 166k. As well, because certain PD programs may be incompatible with the new RAM DISK driver, the Ram41\_71 has been provided until such incompatibilities have been resolved. Unlike the RAM DISK driver, the Ram41\_71 reformats every time it is mounted.

### **CMD and PPI Device Support**

Two drivers have been supplied to support the CMD HD Series hard drives - HD1581 and HardDrive. Both of these drivers take advantage of the CMD HD's built in clock to upload the time and date to GEOS. On RAM expanded systems, it is possible to switch back and forth between these two drivers and partition types. Simply double-click on the disk driver of the partition type you wish to enter.

Two drivers have also been supplied to support the use of CMD's RAMLink and PPI's RAMDrive - RLDrive and RL1581. It is possible to switch back and forth between these two drivers and partition types. Simply double-click on the disk driver of the partition type you wish to enter.

### **Native Mode Subdirectories**

Please note that when using Native Mode subdirectories on the HD, RAMDrive, or RAMLink that it is not advisable to move a subdirectory folder entry in the directory listing. If you do move a subdirectory folder, then you should immediately perform a validate from the action menu.

### **QuickMove**

A gateWay compatible version of QuickMove has been included with the gateWay to allow copying files from one partition to another on CMD and PPI devices. This program should be located on the device it is to be used on, and can only copy files between partitions of the type supported by the currently active driver.

### **gateWay Documents and GWMover**

A new file type is supported by the gateWay. This is the gateWay document. These documents are unique in that they can only be run from the gateWay, and that they can take advantage of the gateWay's resources. In fact, although gateWay documents can be viewed as stand alone programs, they are really intended to be an integral part of the gateWay itself.

In order to keep the gateWay small, only those commands and actions that were considered vital, or difficult to support in another fashion were included. The result is that the most used actions are available but certain others are not - for example, the gateWay does not support creating folders (subdirectories) within Native Mode partitions on the CMD HD Hard Drive, RAMLink or RAMDrive.

In most of our day-to-day dealings with the gateWay, this would not be a problem.

However, it must also be recognized that on occasion users of the devices mentioned above may desire the ability to create folders directly from within the gateWay. In order to accomplish this, the gateWay document was created. gateWay documents are gateWay extensions which, with the aid of the GWMover, can be integrated directly into the gateWay. Once a gateWay document has been integrated into the gateWay, it is available under the geos menu. If you were to pull down the menu, you would see at least one gateWay document - that is the Control Panel. However the Control Panel is unique - it is the only gateWay document that cannot be removed from the gateWay.

Six additional gateWay documents can be integrated into the gateWay. Of course, each time one is integrated into the gateWay, it grows larger - reflecting the addition of the document.

gateWay documents can be as simple or complex as the programmer desires. The Control Panel is an example of a complex document, so too is the switcher. HDTime on the other hand, or ScrapPeek are relatively simple.

Some gateWay documents may use the resources of the gateWay itself. Some gateway documents, for example, may require you to highlight a file or group of files on the filePad before opening the gateWay document itself. The gateWay document then performs some action on that file or group.

### **Using GWMover**

At the heart of the gateWay is the GWMover. With the GWMover, it is possible to move documents in and out of the gateWay. The GWMover itself is an application. To open the GWMover, simply double click on its filename, or alternatively, highlight its filename and select the open option from the action menu. When the GWMover opens, it is in copy mode. In this mode, gateWay documents can be integrated into the gateWay.

The left hand side of the GWMover window is occupied by the select window. If there are any gateWay documents either on the disk, or already integrated into the current gateWay, these documents will appear in this area. Clicking on a document's name will select it. Up to twelve document names can be viewed at a time. A slider mechanism allows access to other documents if there are more than twelve. Below the file select window is the drive button. Clicking the button will move you to the next drive. On single drive systems, inserting a new disk and clicking the drive button will open the new disk.

In copy mode, two additional buttons on the right hand side of the window control the actions of the GWMover. Copy causes a selected document to be integrated into the gateWay.

Open will open the gateWay on the current disk. Clicking this button will move you into open mode. Once in open mode, two buttons control the action. Delete will remove the selected gateWay document from the gateWay. Close will return you to copy mode.

Quit will return you to the gateWay.



To add a document to the gateWay:

- open the GWMover. When the GWMover opens, you will be in copy mode.
- select the gateWay document you wish to add by clicking on its filename. The filename will become inverted.
- click on copy. Your drive will whir a few moments as the document is integrated into the gateWay.
- the filename is now missing from the select window, reflecting its addition to the gateWay.
- you can confirm its addition to the gateWay by clicking on open. The document will appear in the file select window

It's important to note that the actual document, not a copy of the document, is integrated into the gateWay. For this reason, always use a copy of the gateWay document. Once a document has been integrated, it cannot be restored, it can only be deleted.

Up to six documents can be integrated into the gateWay. If, after attempting to copy a document into the gateWay, it still appears in the select window, then the copy process has failed. There are two reasons for this. First, the gateWay may be full. Check this by going into open mode and counting the number of documents. If there are six, the gateWay is full and further documents cannot be added until others have been deleted.

Second, the disk may be write-protected. If this is the case, remove the write protect tab, and try again.

When there are no documents to copy into the gateWay, the copy button will be ghosted. If there is not a gateWay on the current disk, the open button will be ghosted.

To remove a document from the gateWay:

- open the GWMover. You will be in copy mode, so click on the open button. This will place you in open mode.
- the integrated gateWay documents will appear in the select window. Click on the file you wish to delete and click on the delete button.
- the drive will whir a moment while the document is removed and the disk is updated. When the window reinitializes the file will be gone.
- if there are no further gateWay documents, the delete icon will be ghosted. Click on close to return to copy mode.
- otherwise, repeat the above procedure to delete further documents.
- Clicking on quit will return you to the gateWay.

It is important to understand that when a document is removed from the gateWay, it is deleted from the disk and is not restored. For that reason, we stress the importance of backing up all gateWay documents before integrating them into the gateWay.

## Section 5

# Task Switching

### Using switcher

Switcher is our answer to multitasking under GEOS. Although not true multitasking, switcher allows quick and convenient switching between two separate applications. When access to either task is desired the task can be simply switched in.

Switcher requires 64k of expansion memory, and consequently, will only install itself on systems with at least 512k of expansion memory. On systems with less than 512k, switcher is unavailable.

In order to activate switcher, the correct switcher file for your system must be on your boot disk (even if you have integrated the switcher into your gateWay using GWMover). As LAUNCH executes it will seek out switcher. If switcher is found, it will be loaded and told to initialize itself. It is only at this time that switcher can completely initialize itself. The switcher cannot be installed from some other disk after boot up.

When the gateWay comes up with switcher installed, a switch can be effected at any time in gateWay 64 by holding down the Commodore key, and while it is depressed, pressing the RESTORE key. With gateWay 128, the Escape (<ESC>) key is used. We call this the task-switch sequence. The first time this is done, nothing will seem to happen, perhaps you may notice the pointer flicker. However, what has happened is that the switcher has stashed away the first context in the REU.

On subsequent uses of the task-switch sequence, the current environment is swapped with the one stored away in the REU. It is now possible to run geoPaint in one context, geoWrite in the other, and be swapping paint scraps easily into your geoWrite document. Or for that matter, geoPublish - the combination of applications or DA's running is limited only by your resources.

If you ever need to check on the status of switcher, simply open it by double-clicking on its name. Shortly, the switcher STATUS box will appear. The STATUS box offers you three pieces of information, the amount of RAM expansion, DMA status (64 versions only), and whether switcher is currently ready or idle.

For GEORAM, RAMLink and RAMDrive systems DMA status will always be off, and has no effect on how the RAM expansion is utilized by the system. However for those systems with a Commodore REU, DMA status reflects whether the high speed direct memory access option is enabled. Most often, you will want this to be on - especially when dealing with geoPaint. However, it should be noted that only one context should have DMA enabled. Should both have this option enabled, there is the possibility that data could be lost while temporarily stashed to the REU.

The STATUS box will always show switcher as idle until the task-switch sequence is pressed the first time. From that point on switcher is ready - pressing the task-switch sequence again will effect a switch.

Three buttons across the bottom of the STATUS box offer some measure of control over switcher. The first of these, CLEAR, will return switcher to the idle state. This may be desirable after swapping drives or mounting another disk driver. Because switcher does not manage disk drivers, it is necessary to reset switcher at that point.

The middle button controls the DMA option. Only on Commodore REU equipped systems will this button effect the system (this button only appears on gateWay 64 versions of switcher). The final button, KILL, does just that - it kills the switcher. Switcher will no longer be available until the system is completely re-booted.

There is only one situation in gateWay 64 under which the switcher is not available. This is when the NMI vector has been repointed by another program - we know of only two applications that do this. The first is geoDebugger, the other is geoTerm. Both programs utilize the NMI vector to their own ends, and in both cases the NMI (and with it switcher) is restored on exit.

Let's take a look at a sample session using switcher:

- boot the gateWay system with switcher present on your boot disk - this will install switcher.
- with the gateWay, create a work disk with both geoWrite and geoPaint and a geoPaint and geoWrite document if you have one.
- perform the task-switch sequence (hold down the Commodore key and press RESTORE or press the Escape key) for the first time - the pointer may flicker a moment - but that is all.
- open geoWrite by double clicking on its file name. Once geoWrite has opened, either go on to open an existing document or create a new one.
- once you document has opened, perform the task-switch sequence once again - you will be back at the gateWay.
- use the task-switch sequence once again and you will be back in geoWrite.
- press the task-switch sequence to return to the gateWay and launch geoPaint. Once geoPaint has opened, either go on to open an existing document or create a new one.
- using the Edit tool, select a region to copy. Click on the edit copy menu thereby creating a photo scrap.
- using the task-switch sequence will bring in geoWrite - pressing the Commodore key and the 'W' will paste the photo scrap just cut into the geoWrite document.
- another task-switch sequence will bring back geoPaint where the sequence of events can be repeated to paste another scrap into geoWrite.

The above technique can also be used to paste multiple scraps into geoPublish. And for programmers a variation on the above technique might prove useful. Much of the gateWay's Control Panel was first designed in geoPaint. Once this was completed, certain graphic elements were easily pasted into a geoWrite document for assembly. The rest of the Control Panel was carefully measured for graphic strings by switching back and forth between geoPaint and the geoWrite document where the measurements were inserted. A usually time consuming, paper and pencil task, was completed in very little time.

It is important to note that switcher manipulates the GEOS environment in ways not intended by Berkeley Softworks - GEOS is not a multitasking kernal and has no provisions for being utilized as

such. Consequently, there are some things to be aware of while using the switcher.

Switcher will handle (and usually quite well) two Desk Accessories being open at the same time. This is possible because each context has a unique name for its swap file. However, both the deskTop and the gateWay will delete a swap file if one is encountered when opening a new disk. So, the warning - don't open or reopen a disk while the alternate context has saved its swap file there. On returning to the alternate context and closing out of the DA, the system will crash.

For similar reasons, don't delete the file you're working on in the other context. Applications don't like to discover that their documents have disappeared!

Never work on the same document in both contexts - the results are unpredictable and generally not fun.

If you've made any changes in a document, try to update before you switch. Most applications will offer you this option. This way, should you be unable to make it back to a previous context, nothing is lost.

Switcher has only two error messages. The first is a requestor asking that disk such and such be placed in drive whatever. This occurs because the disk currently in the drives are not those in the drives when the switch was made. Insert the correct disks and press the Commodore key. If it is not necessary to replace the disks in the drives (i.e. those drives were not being used), then press the RUN/STOP key.

The second error message might be considered fatal: drive order cannot be restored. This error message occurs for one of two reasons: either drive order has been swapped or, a new drive type has been mounted. In either case, the switch will not be effected. Press the Commodore key to return to your current context. To get back to your swapped context, either correct the drive order, or remount the correct drivers and attempt to switch.

## Section 6

### Advanced Topics

#### Optimizing the gateWay

If after a while, you notice that the gateWay takes longer to open than it earlier did, or, that some disks take an especially long time to open under the gateWay, there maybe a few reasons for this and something you might be able to do about it.

First you need to know that on every disk used under the gateWay, there is an additional file. This is the gateWay file - in it is stored such information as the disk icon, the view mode, the size of filePad, the status of the trash can, etc. The gateWay file, called `.info_gw`, is generally invisible and cannot be viewed from the gateWay.

On disks formatted under the gateWay, the info file is always placed as the ninth file entry. However on crowded disks, it is possible the gateWay file could be placed at the end of an already long directory. Consequently, when a disk is opened, the directory must be searched to locate `.info_gw` - the further from the start of the directory the file is placed, the longer the search will take.

If such is the case, the only way to solve the problem is to format a new disk under the gateWay and copy the files from the offending disk over to the new disk.

Its worth noting that this problem will be especially evident on crowded 1541's. Generally, forcing `.info_gw` to the ninth entry will show an improvement. Just how much depends on how far down the list the file was.

To further improve the speed of the gateWay, narrow the view mode to only those files you want to see. This will speed the up the directory routines - because they don't have to load in every file.

Finally, to improve the speed of the gateWay, place the gateWay itself toward the top of each directory. Every time a disk is opened, a gateWay is sought out. If one is found, the gateWay document list is pulled from the gateWay and used to develop the geos menu listing. The color preferences for that disk are also determined at that time as are the function key settings.

## gateWay Shortcuts

Open File	⌘ O
Get Info	⌘ I
Rename	⌘ N
Copy	⌘ K
Erase	⌘ E
Select Page	⌘ S
Select All	⌘ SHIFT S
Reset	⌘ R
Browse	⌘ H
Open Partition	⌘ SHIFT P
Page Up	CRSR LEFT
Page Down	CRSR RT
Scroll Up One Item	CRSR UP
Scroll Down One Item	CRSR DN
Open Drive A	⌘ A
Open Drive B	⌘ B
Open Drive C	⌘ C
Swap Drive A with C	⌘ SHIFT A
Swap Drive B with C	⌘ SHIFT B
Task Switch (64)	⌘ RESTORE
Task Switch (128)	Esc

# Addendum for gateWay v2.5

## Upgrading from earlier gateWay Versions

If you are upgrading to V2.5 from an earlier version of gateWay, you must make a completely new boot disk in order for V2.5 to operate properly. In other words, you must:

- boot GEOS
- format a disk on a 1541 or 1571 drive
- copy all of the required files from your gateWay V2.5 and GEOS system disks to your new boot disk
- execute MakeBoot on the boot device

Refer to your gateWay manual for complete step-by-step instructions on how to create a boot disk.

*Important: DO NOT try to 'upgrade' a boot disk by simply replacing some of the older gateWay files with V2.5 files (doing so is almost certain to cause problems). In order for gateWay V2.5 to operate properly, you **must** create a new boot disk from scratch using V2.5 files only.*

## General Changes in gateWay v2.5

### Making Boot Disks...

#### ...on 1571 Drives

It is now possible to create doublesided 1571 boot disks. Format a disk as double-sided and follow the normal steps used for creating boot disks.

#### ...on 1581 Drives

It is not possible to create a gateWay boot disk on a 1581 disk directly from GEOS. To avoid this problem, make a boot disk on a 1541 or 1571 drive first. Then boot gateWay, copy all the files from your boot disk to a newly formatted 1581 disk, and execute MakeBoot from the 1581 boot disk. You should now be able to boot from that disk.

*Note: Whenever you create a new boot disk or boot partition, you should always execute MakeBoot on that disk or in that partition.*

### Maximum Number of Files

The maximum number of files viewable in any view mode has been reduced for systems without RAM expansion to a total of 32. This change was required to make room for additional features and fixes. The maximum number of files viewable per view mode on systems with RAM expansion remains at 144.

## **Duplicate Feature Added**

A duplicate option has been added to the action menu. You may now select a file on the menu and create a copy of this file on the same disk. You will be prompted for a new name for the copy.

## **TrashCan Mechanism Improved**

The gateWay TrashCan mechanism has been modified so that it is only emptied when the empty trash option is selected from the special menu. Files which are erased or placed into the trash can will only be marked as Trash Can files, and will continue to take up space on the disk until the empty trash option is used.

## **QuickMove Replaced by CMD\_MOVE**

The QuickMove application previously supplied with gateWay has now been replaced by CMD\_MOVE, which works in both 40 and 80 column modes. While this application lacks some of the keyboard shortcuts which were available in QuickMove, it is a better application overall because it allows you to switch drives, and works not only in gateWay, but also operates under GEOS itself when using CMD versions of CONFIGURE.

CMD\_MOVE has two functions: It allows you to change partitions on CMD devices (this can also be done by using 'open partition' on the special menu) and also allows you to copy files from one partition to another.

To use CMD\_MOVE to change partitions:

- launch the CMD\_MOVE application
- use the DRIVE button to select the desired CMD device
- select a partition from the list and click on the OPEN button

The program will move to the selected partition and quit. Make sure you have a copy of the gateWay file on any partition you wish to use, or the system will prompt you to insert a disk containing gateWay.

To use CMD\_MOVE to copy files from one partition to another:

- launch the CMD\_MOVE application
- use the DRIVE button to select the desired CMD device
- select the source partition from the list and click on the FILES button to see the files from that partition (if you don't see the files you want to copy, you may click on the PDIR button to return to the partition directory to select a different partition)
- select the files that you wish to copy. You select any single file by clicking once on its name. Selected files are shown in reverse print. You can de-select a selected file by clicking on its name once again. You can also select or de-select a group of files by dragging the pointer over the filenames while the button is depressed. You will also see a number of option icons near the bottom of the requestor box. These options are (from left to right): De-select All, Select All, Move to Bottom of List, Move to Top of List, Scroll Down one Page, Scroll Up One Page, Scroll Up one File, Scroll Down one File
- click on the OK button when you are done selecting files
- select the destination partition from the list and click on the OPEN button to start the copy process



After the copy process is complete, you may repeat these steps to copy files into other partitions, use the QUIT button to exit to the last partition selected (the destination partition), or select a different partition to exit to from the list and quit to that partition by using the OPEN button.

Please note: to de-select an item in the selection window (such as a partition or file name), you must click on that item again.

## **Disk Driver Changes**

### **Driver Names**

Many of the drivers have slight changes to their names. The most drastic changes are in the CMD device Native Mode drivers, previously called RLDrive and HardDrive. These are now called RL\_Native and HD\_Native.

### **1571 Driver**

An option has been added to allow formatting 1571 disks as single-sided.

### **RAM Disk Drivers**

Validate support has been added to the RAMDisk, GRAMDisk, and RAM41\_71 (RAMOld) drivers. The configuration boxes for these drivers no longer contains a FORMAT option, as the INSTALL button automatically formats them. A KILL button will show up for any driver which is already installed, allowing you to free the memory used by that driver, and this should be used before launching another driver.

The RAMDisk and RAM41\_71 (RAMOld) drivers may now be used on RAMLink and RAMDrive provided you have set aside a larger DACC.

### **FD Drivers Added**

Two new drivers have been added to support CMD FD Series 3.5 inch floppy disk drives. The FD1581 driver supports the use of 1581 partitions, and the FD\_Native driver supports CMD Native Mode partitions.

## **Switcher Changes**

Switcher and Switcher\_128 have been modified for better operation. In the case of Switcher\_128 this has meant increasing the overhead RAM required for operating. In order to use Switcher\_128, RAMLink and RAMDrive users must have a DACC partition of 192K (768 blocks) minimum.

There are no longer separate GEORAM versions of Switcher or Switcher\_128, so the same Switcher file is used regardless of RAM type.

## **New gateWay Documents**

Note: The following gateWay documents will function only when activated from the geos menu. Therefore, you must use GWMover to integrate Bordercross and Flag into the geos menu before they

can be made to perform their intended tasks. See 'gateWay Documents and GWMover' in Section 4 of your gateWay manual for instructions on how to use GWMover.

### **Bordercross**

This gateWay document allows users of CMD device Native Mode partition subdirectories to place up to 8 files into the off-page directory block. This special directory block is automatically appended to any subdirectory viewed within that partition, thus giving access to those files no matter which subdirectory you are in. To use Bordercross:

- select the file that you want to place in the off-page directory block
- select Bordercross from the geos menu

To remove a file from the off-page directory block, you must either delete it or swap it with another file.

### **Flag**

Flag will alternately set or clear a file's '3 drive' flag. Applications marked as a 3-drive program will cause the gateWay auto-swapping feature to be bypassed when the program is launched from drive C. Please note that not all applications will work properly from drive C. To use Flag:

- select the file for which you want to toggle the 3-drive flag
- select Flag from the geos menu