# **READ.ME**

Leonard Poma

Copyright © Copyright©1992-1995 CONSULTRON

COLLABORATORS							
	TITLE :						
	READ.ME						
ACTION	NAME	DATE	SIGNATURE				
WRITTEN BY	Leonard Poma	January 18, 2023					

REVISION HISTORY				
NUMBER	DATE	DESCRIPTION	NAME	

# Contents

#### 1 READ.ME

1.1	CrossDOS	1
1.2	running crossdos from the product disk	2
1.3	installing crossdos	2
1.4	configuring an ms-dos hard drive	2
1.5	changes from versions 3 and 4 of crossdos	3
1.6	changes from version 5 of crossdos	4
1.7	notes for floptical users	4
1.8	who owns this disk anyway?	5
1.9	troubleshooting	6
1.10	other consultron products	8
1.11	electronic registration	8
1.12	technical support	9
1.13	electronic bulletin board service	9
1.14	copyrights, disclaimers and trademarks	10

1

# **Chapter 1**

# **READ.ME**

# 1.1 CrossDOS

CrossDOS 6 Professional \$VER: READ.ME 6.00 (3/4/95) CIN: IUCA-Q3L9

This file describes any changes, highlights and special features for this version and revision of CrossDOS. PLEASE READ THIS FILE FOR IMPORTANT NEWS!

Note: CrossPC is no longer bundled with CrossDOS.

Running CrossDOS from the Product Disk

Installing CrossDOS

Configuring an MS-DOS Hard Drive

Changes from Versions 3 and 4 of CrossDOS

Changes from Version 5 of CrossDOS

Notes for Floptical Users

Who Owns This Disk Anyway?

Troubleshooting

Other CONSULTRON Products

Electronic Registration

Technical Support

Electronic Bulletin Board Service

Copyrights, Disclaimers and Trademarks

## 1.2 running crossdos from the product disk

CrossDOS can be executed from this product disk (particularly if you are running on a floppy based system). Just double-click on the appropriate icon.

To start: double-click on the "PCO" icon. Your internal floppy drive will now be configured as an MS-DOS drive with the name "PCO:". You can now read and write preformatted MS-DOS disks.

If you need to format an MS-DOS disk, double-click on the Format icon in the system drawer. Choose the device to format from the device list and answer any of the questions and options given.

It's that simple.

#### 1.3 installing crossdos

You may choose to install CrossDOS using the Install program on  $\leftrightarrow$  the

disk. This is particularly efficient if you have a hard drive. If you do wish to install, DO NOT move the files over manually! The Install program makes many intelligent choices depending on your system configuration.

Once installed, you can use most features immediately. A few features such as MS-DOS hard disk access may require additional operations be performed before you use it. For further information see

Configuring an MS-DOS Hard Drive

## 1.4 configuring an ms-dos hard drive

CrossDOS supports MS-DOS formatted hard drives. If the drive you configure is already formatted, there are certain hard drive formats that are not 'true' MS-DOS. In this case, we do our best to decipher the disk but 'all bets are off'.

We do require that you install both products using our Install program. Also, select Configure Hard Disk to have us try to create a proper mountfile to match.

You will be asked in the Install program whether you want to configure one of three types of hard disks.

One: A 'true' MS-DOS hard disk configured as the entire disk. This

type is useful if you wish to transfer data between the Amiga and a stand-alone PC. We do HIGHLY recommend that this type of hard disk be formatted on the PC first then brought to the Amiga for configuring.

Configure a 'true' MS-DOS hard disk NOW!

Two: An 'image' of an MS-DOS hard disk within an Amiga hard disk partition. This type is particularly useful with CrossPC, PC-Task, AtOnce and GoldenGate products. Configure an 'image' of an MS-DOS disk on an Amiga partition NOW!

Three: An 'image' of an MS-DOS hard disk within a file. This type is useful with Bridgeboard, CrossPC, PC-Task, AtOnce and GoldenGate products.

Configure an 'image' of an MS-DOS disk on a file NOW!

For further information refer to Chapter 5 in the manual "Configuring a Hard Drive" that discusses the different hard drive types and special considerations.

#### 1.5 changes from versions 3 and 4 of crossdos

This section is important for users who have either version 3  $\,\leftrightarrow\,$  or 4

of CrossDOS.

There have been changes to CrossDOS for a multitude of reasons. These reasons range from efficiency, speed, robustness and more. We hope you like the changes. Most of the code is more efficient in both speed and code size.

CrossDOS 6 requires 2.0 of the Amiga operating system to run. Previous versions allowed operation under 1.2 of the OS.

The name of the file system has been changed from MSDOSFILESYSTEM to CrossDOSFileSystem. The file system code has been optimized for speed so that reads and writes are about 10 times faster.

The old MS-DOS devices defaulted to the names DIO: through DI3:. We now use PCO: through PC3:.

We've replaced the MountMF, MFORMAT and MDISKCOPY with standard system commands called Mount, Format and DiskCopy, respectively. These commands, located in the system drawer, have been enhanced to handle both CrossDOS or Amiga disks. Refer to the manual in Chapter 4 for more details.

We've replaced the TxFilter and IntlTrans commands with a commodity called CrossDOS located in your system drawer. Refer to the manual in Chapter 4 for more details.

The mfm.device driver used to access the floppies have been further optimized to read and write about 8 times faster than version 3 and about 4 times faster than version 4 CrossDOS.

We support MS-DOS hard drives. We supply a configuration program to simplify the process of creating the proper mountfile.

```
Configuring an MS-DOS Hard Drive
We now work across Amiga networks.
```

Many other improvements have been made that are designed to be transparent to the user but which make it easier to use.

#### 1.6 changes from version 5 of crossdos

This section is important for users who have version 5 of CrossDOS.

CrossDOS 6 requires 2.0 of the Amiga operating system to run. Version 5 allowed operation under 1.2 of the OS.

The file system code has been optimized for speed so that writes are about 10 times faster.

The mfm.device driver used to access the floppies have been further optimized to read and write about 2 times faster.

We've improved our hard drive configuration program. We now work across Amiga networks.

Many other improvements have been made that are designed to be transparent to the user but which make it easier to use.

Note: CrossPC is no longer bundled with CrossDOS. CrossDOS 6 will operate correctly with CrossPC.

### 1.7 notes for floptical users

CrossDOS supports floptical drives. If you do not know if you have a floptical drive you probably don't have one. A floptical drive can support the MS-DOS 720K, 1.44M and its own 20M floptical disk format. It can also support an Amiga 20M hard drive format.

To configure the floptical use the Configure Hard Disk to allow us to attempt to create a proper mountfile. When you are configuring the floptical, make sure you have a preformatted MS-DOS disk in the drive at the time. Any MS-DOS disk should do (such as an 720K disk). This is needed to sense the proper information from the drive.

Formatting with the floptical drive is slightly different too. This is because the floptical cannot properly sense the size of the unformatted disk in the drive. There are two ways to format in the floptical drive.

One: Insert a preformatted MS-DOS disk in the drive with the same

formatted size as you want to format. If you want to format a 1.44M disk, for example, insert a preformatted MS-DOS 1.44M disk in the drive first. Then, execute the Format program. Proceed with the program until you come the requester that says "Ok to format volume ... " then insert the actual disk to be formatted and proceed.

Two: Double-click on the format project icon in the :system/Alt\_Formats drawer that corresponds to the desired format. For example, double-click on the MSDOS\_720K.Format icon to 'force' the format of the disk to 720K. Proceed through the format.

Choose the method that makes you comfortable. Experimentation is your best teacher.

NOTE: At this time, GVP controllers will not permit a format of a blank floppy using the Format program. In order to low-level format a blank floppy you need to use their FAAASTPREP program, select "Manual Installation" then select "Low Level Format". When completed, exit FAAASTPREP and perform a Format with the "Quick Format" option.

### 1.8 who owns this disk anyway?

Don't worry, this is not a rehash of the license agreement you've already read on the front of the disk envelope. This concerns people who are using PC emulator products on the Amiga. Examples of emulators are CrossPC, PC-Task, Bridgeboard, AtOnce, GoldenGate or EMPLANT/PC-586.

If you've configured an MS-DOS disk for CrossDOS that is simultaneously configured for one of the emulators, you may run into a problem.

The problem: When more than one file system tries to write to the same physical disk volume/partition, the disk may end up corrupted. Both CrossDOS and the emulators running MS-DOS are file systems.

Let me draw a simple analogy. Let's say there is one checking account and you have a set of checks and a friend has another set of checks to the same account. If the both of you never cooperate to balance the account when checks are written, the account will eventually be overdrawn.

Similarly, file systems tend to cache small portions of the disk so as to speed disk access. Let's suppose CrossDOS and the emulator (running MS-DOS) just happen to cache the same disk information. If CrossDOS modifies the information it has cached, MS-DOS (the other file system) will not know the information was changed. Now, CrossDOS creates a new file and uses some blocks not previously used. If MS-DOS wishes to create a file, it might reuse those blocks allocated by CrossDOS. When this happens the disk is most likely corrupted since neither file system has the correct information. Both have also modified the disk with out-of-sync information. The solution: If both file systems would cooperate when writing new information to the disk, we'd have our problem solved. For reasons which are complicated, that solution is not likely to happen.

You can have as many file systems read the disk as long as no writing occurs. However, if you must write, there are things that can be done to significantly minimize disk corruption.

- Create two partitions. One for CrossDOS to write to and MS-DOS to read from and the the other for MS-DOS to write to and CrossDOS to read from.
- Manually prevent multiple file systems from simultaneously writing to the disk.
- After writing the disk with MS-DOS, perform a DiskChg (diskchange) for the CrossDOS device. This action will reread the disk from the Amiga side.
- After writing the disk with CrossDOS, perform a <CTRL C> (a type of diskchange) from the MS-DOS command prompt. If this is not possible, run the CHKDSK program. This action will reread the disk for the MS-DOS side.

# 1.9 troubleshooting

Here are some ideas to help you should you have trouble  $\leftrightarrow$  using

#### CrossDOS.

General

- Ensure you have configured the drive in which you wish to use the MS-DOS disk by Mounting it. The device names correspond to the device names given by Commodore. For example, PCO: is the MS-DOS device name corresponding to DFO: and PC1: is the MS-DOS device name corresponding to DF1:.
- $\cdot$  Avoid file names longer than 8 characters.
- $\cdot$  Avoid file extensions longer than 3 characters.
- $\cdot$  Avoid space in file names or file extensions.
- Make sure you do not mix disk types and format types. For example, do not do a low density format on a high density disk or visa versa. Do not try to read a high density formatted disk in a low density drive.
- When using Workbench, avoid transferring files with file extensions. Rename them first if necessary.
- Ensure the file formats you want to use between both the Amiga program and the MS-DOS program are compatible. For example, an Amiga Final Copy file is not readable by an MS-DOS WordPerfect wordprocessor.
- Should you exhibit read or write errors with no specific pattern, try cleaning the floppy drive heads of both the Amiga and MS-DOS computers.
- The easiest way to check an MS-DOS disk from the Amiga is to run the DiskChk program included with CrossDOS. The following is a list of most of the CrossDOS error codes.Error Messages

Error Messages

No.	Name	Description
-1	IOERR OPENFAIL	device/unit failed to open
-2	IOERR ABORTED	request aborted
-3	IOERR NOCMD	command not supported
-4	IOERR_BADLENGTH	not a valid data length
20	TDERR_NotSpecified	general catch all error code
21	TDERR_NoSecHdr	couldn't find any sectors on track
22	TDERR_BadSecPreamble	bad sector header
23	TDERR_BadSecID	bad sector header
24	TDERR_BadHdrSum	sector header had incorrect CRC
25	TDERR_BadSecSum	data had incorrect CRC
26	TDERR_TooFewSecs	couldn't find enough sectors
27	TDERR_BadSecHdr bad	sector header
28	TDERR_WriteProt	can't write to a protected disk
29	TDERR_DiskChanged	no disk in the drive
30	TDERR_SeekError	couldn't find track 0
31	TDERR_NoMem	ran out of memory
32	TDERR_BadUnitNum	asked for a unit > 3
33	TDERR_BadDriveType	not a recognized drive
34	TDERR_DriveInUse	someone else allocated the drive
35	TDERR_PostReset	user hit reset; awaiting doom
36	MDERR_OutofTracks	out of physical tracks
37	MDERR_InvParam	invalid parameter (MD_SETPARMS)
38	MDERR_IndexNotSync	index signal not available
39	MDERR_WrongTrack	drive head on wrong physical track

Possible Problems and Solutions

I changed the MS-DOS disk on the 51/4" drive and still get the old directory from the previous disk.

The 5 1/4" drive doesn't support the disk change signal. When you change disks, execute the CLI DiskChange command or our DiskChg command on the drive before your next access of the new disk.

I copied a file to an MS-DOS disk but can't find it when reading the disk on my PC. Avoid using spaces in file names. The MS-DOS computer ignores everything after the space character.

#### DF0:????

This is OK. The task that handles the AmigaDOS device called DF0: can't recognize foreign disk formats such as MS-DOS.

Disk Ejected Too Soon.

Disk removed before all information was written to it. Put the disk back into the drive and Retry might recover without corruption. We recommend you wait at least 3 seconds from the last disk access before removing the disk.

#### Disk Full.

Exceeded the capacity of the system disk. Remove unnecessary files from the disk.

Error=21.

Could not find any sectors on the specified track. Probably not an MS-DOS standard density formatted disk readable by your drive. Error=22. Sector not aligned with index signal from disk. Usually not disastrous. Retry might recover. Error=23. Sector not found. Disk might be corrupt. Retry might recover. Error=24. Sector identification information corrupt. Retry might recover. Error=25. Sector data might be corrupt. Retry might recover. Error=38. Index signal from the drive not received. Amiga needs service to correct a hardware problem. Not a DOS Disk. Ensure the disk is an MS-DOS disk capable of being read by your drive. The disk may be an AmigaDOS disk or MS-DOS high density formatted disk in a low density drive. Technical Support

# 1.10 other consultron products

In addition to CrossDOS our product line also includes:

CrossMAC - Mac file system for the Amiga. Allows the Amiga to read and write Mac floppies and hard drives. CrossMAC demo archive (CrossMAC\_demo.lha) on this disk. This is a READ-ONLY demo allowing you to read Mac floppies (with the appropriate hardware).

High-density floppy drives - internal and external models. Internal models for 2000, 3000 and 4000. External model for all Amigas. While supplies last.

Bernoulli 230M drives - internal and external models. Extra Bernoulli cartridges can be purchased separately.

Call (313) 459-7271 for further information and pricing. Visa and MasterCard supported.

## 1.11 electronic registration

We suggest that you immediately register the product you've purchased. This will allow us to inform you of new products or upgrades and be eligible for product discounts. Currently we provide two methods of registering the Customer Identification Number and address with us:

- EMAIL. Send the file s:Registration.data intact to either our Internet account: consultron@consultron.plymouth.mi.us (primary) cstron@m-net.arbornet.org (secondary) or logon to our BBS.
- Paper. Send us the paper output generated by or Registration program to the address listed in the output.

We would appreciate if you would use the EMail method since it help to eliminate typographical errors. Register NOW!

### 1.12 technical support

If you purchased our products as marketed by CONSULTRON, we'll try to give you the best technical support possible. You will notice your Customer Identification Number is located in the third line of the READ.ME file and will automatically be entered into the Registration program. Please write this number on the disk, in the manual and anywhere convenient. When you call for help, please be ready with your Customer Identification Number (CIN). We hope this doesn't inconvenience you much. This policy helps keep our costs down and we can pass those savings on to you.

(313) 459-7271 10:00 AM to 5:00 PM Eastern Time

#### 1.13 electronic bulletin board service

We've provided an electronic bulletin board service to better serve you. It may contain update patches should there be any. Other public domain or shareware files are available that may be useful to you. We also have demo versions of most of our programs that allow you to "try before you buy".

The telephone number of our BBS is:

(313) 459-7271 6:00 PM - 10:00 AM EST Weekdays and all day on weekends and U.S. holidays

Currently our service is 2400-14.4 baud 8N1

Thank you.

# 1.14 copyrights, disclaimers and trademarks

COPYRIGHTS

CrossDOSFileSystem, mfm.device, MountMF, DiskChk, DiskChg, Registration, ConfigDisk, Install, Dr\_CrossDOS (c) Copyright 1988-1995 CONSULTRON. All Rights Reserved.

Mount, DiskCopy, Format, CrossDOS, Installer and Installer project icon, AmigaGuide, amigaguide.library, (c) Copyright 1991-93 Commodore-Amiga, Inc. All Rights Reserved. Reproduced and distributed under license from Commodore.

#### DISCLAIMERS

MOUNT, FORMAT, DISKCOPY, INSTALLER AND AMIGAGUIDE SOFTWARE ARE PROVIDED "AS-IS" AND SUBJECT TO CHANGE; NO WARRANTIES ARE MADE. ALL USE IS AT YOUR OWN RISK. NO LIABILITY OR RESPONSIBILITY IS ASSUMED.

#### TRADEMARKS

CrossDOS and CrossPC are trademarks of CONSULTRON. AmigaGuide is a trademark of Commodore-Amiga, Inc.