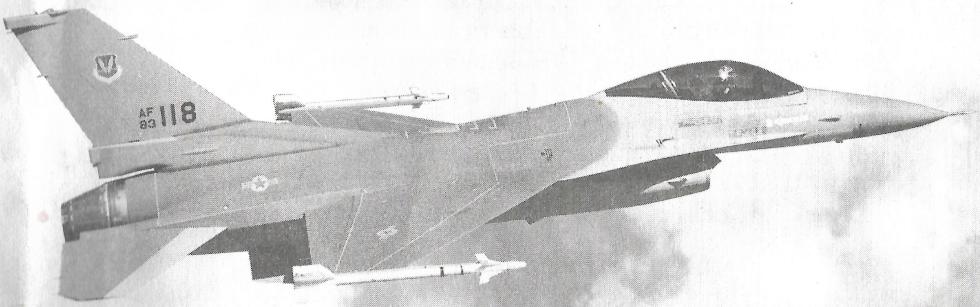
FALCON GOLD



FLIGHT MANUAL

A Word About This Game

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SoftVideo™

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Introduction

The world's best flight simulators just got better! *Falcon Gold* puts our award-winning and best-selling simulations on one convenient CD-ROM:

- *Falcon 3.0* — fly and fight in three theaters (Kuwait, Panama and Israel) as well as train at Nellis in this F-16 fighter jet simulation
- *Operation: Fighting Tiger* — fly new types of missions in the FSX in three new theaters (Japan, Korea and India/Pakistan) in this Campaign Disk
- *MiG-29* — fight head-to-head against an F-16 in this MiG-29 simulation
- *Hornet: Naval Strike Fighter* — fight in Bosnia for the Navy in this F/A-18 Hornet simulation

In addition, *Falcon Gold* contains *Art of the Kill,* a dogfighting trainer which includes an hour-long digitized video and a book written by Pete Bonanni, a Weapons Officer and Instructor Pilot in the Air National Guard.

Contents of the package

Your *Falcon Gold* package should contain:

- *Falcon Gold* CD-ROM
- *Falcon Gold* Manual
- *Falcon 3.0* — Flight Manual, Release Notes and Communications Handbook, Quick Reference Card, Customer Support Question and Answer Booklet, and two maps
- *Operation: Fighting Tiger* — Flight Manual and map
- *MiG-29* — Flight Manual and Quick Reference Card
- *Hornet: Naval Strike Fighter* — Flight Manual, Release Notes, Quick Reference Card, and map
- *Art of the Kill* — book

How to use the documentation

Because *Falcon Gold* comes with so much reading material, it can be difficult to decide what to read first. Your first step is to read the instructions in this manual which cover how to install and load *Falcon Gold.* You can disregard any references to installation and loading in any of the other manuals.

Once the simulations are up and running, please read the *Falcon 3.0* Flight Manual first. Since *Falcon 3.0* is the basis for *MiG-29* and *Hornet,* you'll want to master the basic concepts in *Falcon 3.0.*

Read the *Operation: Fighting Tiger* Flight Manual for more information on missions and campaigns in addition to specific information about the FSX.

Read the *MiG-29* Flight Manual to learn how to fly and fight in this Russian fighter jet.

Read the *Hornet* Flight Manual to learn how to fly and fight in this U.S. Navy carrier-based jet.

Read the *Art of the Kill* book as you watch Fighter Air Combat Trainer, the digitized training video.

Don't forget to also print and read the Readme files: README.TXT for *Falcon Gold,* READF3.TXT for *Falcon 3.0,* READM29.TXT for *MiG-29* and READF18.TXT for *Hornet: Naval Strike Fighter.*

System requirements for the simulations

The minimum system requirements are:

- IBM 80386 or 80486 compatible
- 1MB RAM
- 604K (618,496 bytes) of free conventional memory
- DOS 5.0 or later
- VGA graphics
- CD-ROM drive
- Hard drive with 11MB free

We recommend the following:

- Joystick, dual joysticks, CH FlightStick Pro, ThrustMaster Flight Control System (FCS) or rudder pedals
- ThrustMaster Weapons Control System (WCS)
- Mouse
- Ad Lib, Sound Blaster, Roland MT-32 or Roland LAPC-1 sound card
- 2MB RAM with EMS (expanded memory)
- Expanded memory manager, such as EMM 386, QEMM or 386Max
- Null-modem serial cable or modem for two-player communications
- Novell NetWare network for multiplayer communications

For optimum performance, you should have the following:

- IBM 80486 compatible
- 4MB RAM with EMS (expanded memory)
- 604K (618,496 bytes) of free conventional memory

- DOS 5.0 or later
- 16-bit VGA graphics
- Double-speed CD-ROM drive
- Hard drive with 11MB free
- Dual joysticks, CH FlightStick Pro with rudder pedals, or ThrustMaster FCS and WCS with rudder pedals
- Sound Blaster *and* either a Roland MT-32 or Roland LAPC-1 sound card

System requirements for *Art of the Kill*

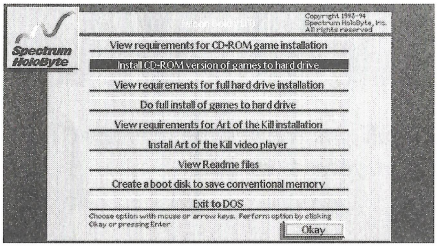
The system requirements for the *Art of the Kill* video player are:

- IBM 33MHz 80386 or 80486 compatible
- 2MB RAM with XMS (extended memory) or EMS
- 585K (599,040 bytes) of free conventional memory
- DOS 5.0, DOS 6.0 or DR DOS 6.0
- Super VGA graphics (640 x 480 x 256 colors) VESA compatible
- CD-ROM drive
- Hard drive with 1MB free
- Sound Blaster, ProAudio Spectrum or Windows Sound System card (required for audio)

How to install the simulations

Before starting the installation, please be sure you have the proper CD-ROM software installed on your machine. If you are unsure whether you have the proper software installed on your computer, consult your CD-ROM owner's manual for more information.

1. Insert the *Falcon Gold* CD-ROM in your CD-ROM drive.
2. Type `d:` [Enter] at the DOS prompt. (If your CD-ROM drive is a letter other than "d," type that letter instead.)
3. Type `install` [Enter] at the DOS prompt. You should see the screen below.



4. Click on "View requirements for CD-ROM game installation" or "View requirements for full hard drive installation." If a system requirement is highlighted in yellow, you will be able to install the games but may have problems running them. If a particular requirement is highlighted in red, you cannot install the games.
5. If a particular system requirement is highlighted in red, click on "Suggest Fix" for possible solutions on solving the problem.
6. Decide on either a CD-ROM install or a full install. A CD-ROM install is a minimal installation of the games which takes up 11MB on your hard drive. A full install is a complete installation of all the simulations which takes up 23MB on your hard drive.
7. Click on either "Install CD-ROM version of games to hard drive" or "Do full install of games to hard drive."
8. After *Falcon Gold* has completed installing the games, click on "View Readme file" to read the Readme files onscreen for *Falcon Gold, Falcon 3.0, MiG-29* and *Hornet.*
9. Click on "Create a boot disk to save conventional memory" if you are having problems finding enough free memory to run the games. See "Creating a boot disk" below.

How to install *Art of the Kill*

Before starting the installation, please be sure you have the proper CD-ROM software installed on your machine. If you are unsure whether you have the proper software installed on your computer, consult your CD-ROM owner's manual for more information.

1. Insert the *Falcon Gold* CD-ROM in your CD-ROM drive.
2. Type `d:` [Enter] at the DOS prompt. (If your CD-ROM drive is a letter other than "d," type that letter instead.)
3. Type `install` [Enter] at the DOS prompt.
4. Click on "View requirements for Art of the Kill installation." If a system requirement is highlighted in yellow, you will be able to install the video player but may have problems running it. If a particular requirement is highlighted in red, you will not be able to install the *Art of the Kill* video.
5. If a particular system requirement is highlighted in red, click on "Suggest Fix" for possible solutions on solving the problem.
6. Click on "Install Art of the Kill video player" to install *Art of the Kill* to your hard drive.
7. At the end of the install, you will see the message "The installation of the Art of the Kill video player is finished."

8. The installer will then display the Video Player Configuration screen, which will display the hardware the installer has detected in your machine. If "Video Card Type" displays "Auto-detect," the installer will try to automatically determine which video card you have. If you know exactly what video card you have, you can select "Special Video Setup" to choose the appropriate video card.
9. Once you're finished with the Video Player Configuration screen, select "Quit" to exit the installer.

How to load the simulations

Once you've finished installing the simulations from the *Falcon Gold* CD-ROM, you're ready to fly! To start one of the simulations:

1. Change to the FALCONCD directory on your hard drive. For example, if you installed the simulations to C:\FALCONCD, type the following:

   `c:` [Enter]

   `cd \falconcd` [Enter]
2. To run *Falcon 3.0*, type `falconcd` [Enter].

   To run *MiG-29*, type `migcd` [Enter].

   To run *Hornet: Naval Strike Fighter*, type `hornetcd` [Enter].
3. If you did a CD-ROM install, you will need to keep *Falcon Gold* in your CD-ROM drive. If you did a full install, you do not need the CD-ROM to run any of the simulations.
4. After you load a simulation, you should set up your game options at the System Setup screen in the Configuration area. Choose a control device for "Flight Control." Select the appropriate option for "Detail Level." Choose the correct sound option for "Bkgrd Sound," "Radio Messages" and "Sound and Music."

How to load the *Art of the Kill* video player

Once you've finished installing the *Art of the Kill* video player from the *Falcon Gold* CD-ROM, you're ready to watch the video! To start Fighter Air Combat Trainer, the *Art of the Kill* video:

1. Change to the AOTK directory on your hard drive. For example, if you installed the simulations to C:\AOTK, type the following at the DOS prompt:

   `c:` [Enter]

   `cd \aotk` [Enter]
2. To run the *Art of the Kill* video, type `aotk` [Enter].

3. You will need to keep the *Falcon Gold* CD-ROM in your CD-ROM drive for the *Art of the Kill* video.

Art of the Kill video player key commands

Use the following keyboard commands in the *Art of the Kill* video player:

Press [↑] and [↓] to select which tape to play.

Press [Enter] to start the video from the beginning of the selected tape or if the video is paused.

Press [←] (if a tape is playing) to restart the currently selected tape.

Press [→] (if a tape is playing) to move to the beginning of the next tape and continue playing.

Press [Spacebar] to pause the current tape.

Press [Esc] to stop the current tape (if one is playing). If no tape is playing, press [Esc] to exit to DOS.

SoftVideo technology

In our efforts to provide you the best products possible, Spectrum HoloByte would like to introduce SoftVideo™ from TMM, Inc. (Total MultiMedia, Inc.). We feel that SoftVideo is the best software-only video playback available today. SoftVideo's fractal compression allows playback up to 30 frames per second in 16-bit, 15-bit or 8-bit color modes in full or quarter screen windows at single-speed CD-ROM rates. With SoftVideo, we will continue to improve the look and quality of our products and add to your enjoyment. We invite you to notice the difference in the video in our new products and other products available. Our future products will use SoftVideo to increase realism and take your enjoyment to new heights.

Descriptions of the Red Flag training sorties

Art of the Kill comes with specific Red Flag missions to help you practice the lessons from the book and video. These Red Flag missions are automatically copied to your FALCONCD directory. To load an *Art of the Kill* mission, load *Falcon 3.0,* select the mission and then click on the Load button.

The training missions for *Art of the Kill* are described below:

OFFBFM1 illustrates a bandit's turn circle. F-16 one mile at the stern of a MiG-29. Co-airspeed at 450 KCAS. Co-altitude of 8,000 ft AGL. Guns for weapons.

OFFBFM2 illustrates an outside bandit's turn circle. F-16 two miles at the stern of a MiG-29. Co-airspeed at 450 KCAS. Co-altitude of 8,000 ft AGL. Guns for weapons.

OFFBFM3 illustrates how airspeed affects turn circles. F-16 one mile at the stern of a MiG-29 as in OFFBFM1 but at 300 KCAS. Guns for weapons.

OFFBFM4 illustrates how airspeed affects turn circles. F-16 two miles at the stern of a MiG-29 as in OFFBFM2 but at 300 KCAS. Guns for weapons.

DEFBFM1 illustrates a bandit inside your turn circle. MiG-29 one mile at the stern of an F-16. Co-airspeed at 450 KCAS. Co-altitude of 8,000 ft AGL. Guns for weapons.

DEFBFM2 illustrates a bandit outside your turn circle. MiG-29 two miles at the stern of an F-16. Co-airspeed at 450 KCAS. Co-altitude of 8,000 ft AGL. Guns for weapons.

DEFBFM3 is the same as DEFBFM1 except both aircraft are at 300 KCAS.

DEFBMF4 is the same as DEFBFM2 except both aircraft are at 300 KCAS.

DEFBFM5 is the same as DEFBFM3 except the MiG-29 is replaced by a MiG-23.

DEFBFM6 is the same as DEFBMF4 except the MiG-29 is replaced by a MiG-23.

HEADBFM1 is a head-on setup at three miles separation. F-16 heading of 0° with MiG-29 heading of 180°. Co-airspeed at 450 KCAS. Co-altitude of 8,000 ft AGL. Guns and AIM-9Ms for weapons.

HEADBFM2 is a line abreast setup. F-16 heading of 0° with MiG-29 heading of 0°. Co-airspeed at 450 KCAS. Co-altitude of 8,000 ft AGL. Guns and AIM-9Ms for weapons.

HEADBFM3 is the same as HEADBFM1 except the MiG-29 is replaced by a MiG-19.

HEADBFM4 is the same as HEADBFM1 except the MiG-29 is replaced by a MiG-23.

HEADBFM5 is similar to HEADBFM1 except the vertical separation is 5,000 ft and the F-16 has the positional advantage.

HEADBFM6 is similar to HEADBFM1 except the vertical separation is 5,000 ft and the MiG-29 has the positional advantage.

HEADBFM7 is similar to HEADBFM1 except the MiG-29's heading is 225° with 135° aspect on the F-16 at one mile. The F-16's setup is unchanged.

HEADBFM8 illustrates a high heading crossing angle on initial pass. This Red Flag mission is similar to HEADBFM1 except the MiG-29's heading is 270° with 90° aspect on the F-16 at one mile. The F-16's setup is unchanged.

Troubleshooting the simulations

The most common problem in loading *Falcon Gold* is finding enough free conventional memory. Most IBM PC compatible computers come standard with at least 1MB RAM. The first 640K RAM is known as conventional memory. Physical memory above 1MB RAM is known as extended memory. Some of *Falcon Gold*'s features use expanded memory (EMS). Memory managers (such as EMM386, QEMM or 386Max) can convert extended memory to expanded memory.

Due to the realism and complexities of these simulations, *Falcon Gold* requires a lot of free conventional memory to operate. Specific amounts required for each game are listed below:

FALCONCD.EXE	601K (615,424 bytes)
MIGCD.EXE	602K (616,448 bytes)
HORNETCD.EXE	604K (618,496 bytes)

If you do not have enough free conventional memory, an error message (such as "Program too big to fit into memory") will be displayed.

Type **mem** [Enter] at the DOS prompt to see how much free conventional memory you have. The number on the line "largest executable program size" must be at least the number given above to run a particular simulation.

Finding free memory

To configure your computer with as much available conventional memory as possible, you *must* load DOS high. Check your CONFIG.SYS file to make sure it includes the line "DOS=HIGH."

Run your memory manager's optimization program to free up as much conventional memory as possible. If you're using DOS 6.0 or later, type **memmaker** [Enter] at the DOS prompt. If you're using QEMM, type **optimize** [Enter]. If you're using 386Max, type **maximize** [Enter].

Falcon Gold will not run if you have any RAM-resident programs (such as RAM disks, DOS shells, print spoolers, etc.) running in the background. You can try loading them into high memory instead of conventional memory. You can also temporarily disable them by temporarily modifying your AUTOEXEC.BAT and CONFIG.SYS files so they do not load TSRs.

A commercial memory manager such as QEMM or 386Max can improve your computer's performance by using less conventional memory.

Finally, *Falcon Gold* will not run under Windows.

Creating a boot disk

If you are still having problems finding enough free memory, the simplest solution is to create a special floppy disk called a "boot disk." Use this disk to configure your computer when you turn it on. The boot disk contains versions of your computer's startup files, AUTOEXEC.BAT and CONFIG.SYS, that will work with *Falcon Gold.* When you are done playing with the games, you can remove the boot disk, restart your comptuer and return to your original configuration.

The easiest way to make a boot disk is to let the installer do it for you. Before you start, make sure you have a blank disk handy.

1. Insert a blank disk into your floppy drive. To create a bootable system disk, type `format a: /s` [Enter] at the DOS prompt.
2. Insert *Falcon Gold* into your CD-ROM drive. Type `install` [Enter] at the DOS prompt.
3. Select the "Create a boot disk to save conventional memory" option. The installer will remind you to have a formatted system disk handy. Click "Okay."
4. The next window shows you the names of your computer's startup files which the installer will copy to the boot disk. Normally, these startup files are AUTOEXEC.BAT and CONFIG.SYS (which are located in your root directory). Click "Okay" to continue.
5. You see a command or commands from your current startup files. These lines install your expanded memory manager. Select the memory manager command you want copied to your boot disk and click "Okay."
6. The next window shows your current Path line. As before, select the Path statement you want and click "Okay."
7. The installer shows the new AUTOEXEC.BAT and CONFIG.SYS startup files for your boot disk.
8. Click "Write" and the installer will create your boot disk. When the boot disk is created, click "Okay" to return to the main menu of the installer.

If you are using a software compression driver on your hard drive (such as DoubleSpace, Stacker or Super Stor), you may need to modify your boot disk. Edit the CONFIG.SYS file on the boot disk to include the device driver and load it high with the Devicehigh command. Consult the manual for your software compression utility if you need further instructions on how to load the driver into high memory.

If you chose to do a CD-ROM installation of the games, you will also need to modify your boot disk to include the drivers for your CD-ROM drive. Edit the AUTOEXEC.BAT and CONFIG.SYS files to include the drivers and load them high. You may also need to include SCSI drivers if your CD-ROM drive uses a SCSI interface. Consult your CD-ROM manual if you need further instructions.

Boot disk examples

The AUTOEXEC.BAT and CONFIG.SYS files below show examples for different system configurations.

For CD-ROM driver, mouse, EMS and EMM386:

```
prompt $p$g
path c:\dos;c:\cd
lh c:\cd\mscdex.exe /d:mscd000 (CD-ROM driver)
lh c:\mouse\mouse
```

```
device=c:\dos\himem.sys
device=c:\dos\emm386.exe 1024 ram
buffers=30,0
files=30
dos=umb
lastdrive=e
fcbs=16,0
dos=high
stacks=9,256
devicehigh=c:\dos\setver.exe
devicehigh=c:\cd\mdscd_fd.sys /d:mscd000 /n:1 (replace with your CD-
  ROM driver)
```

For CD-ROM, QEMM, VESA, mouse and SCSI:

```
c:\qemm\loadhi c:\scsi/mscdex.exe /d:aspicd0 /m:12 /l:e (CD-ROM
  driver)
path c:\dos;c:\qemm;c:\msmouse;c:\utils;c:\bat
c:\mach32\vvesa (replace with your VESA driver)
prompt $p$g
c:\msmouse\omouse.com (replace with your mouse driver)
```

```
device=c:\qemm\qemm386.sys ram
dos=high
files=30
buffers=30
stacks=9,256
lastdrive=f
device=c:\qemm\loadhi.sys c:\scsi\aspi2dos.sys /d /z (replace with
  your SCSI interface driver)
device=c:\qemm\loadhi.sys c:\scsi\aspicd.sys /d:aspicd0 (replace with
  your SCSI interface driver)
device=c:\qemm\loadhi.sys c:\scsi\aspidisk.sys /d (replace with your
  SCSI interface driver)
```

For CD-ROM, QEMM, DoubleSpace, mouse and SCSI:

```
c:\qemm\loadhi c:\scsi/mscdex.exe /d:aspicd0 /m:12 /l:e (CD-ROM
  driver)
path c:\dos;c:\qemm;c:\msmouse;c:\utils;c:\bat
prompt $p$g
c:\msmouse\omouse.com (replace with your mouse driver)
```

```
device=c:\qemm\qemm386.sys ram
dos=high
files=30
buffers=30
```

```
stacks=9,256
lastdrive=f
device=c:\qemm\loadhi.sys c:\scsi\aspi2dos.sys /d /z (replace with
  your SCSI interface driver)
device=c:\qemm\loadhi.sys c:\scsi\aspicd.sys /d:aspicd0 (replace with
  your SCSI interface driver)
device=c:\qemm\loadhi.sys c:\scsi\aspidisk.sys /d (replace with your
  SCSI interface driver)
device=c:\qemm\loadhi.sys c:\dos\dblspace.sys /move (DoubleSpace
  driver)
```

Full install of simulations

Although it takes more hard drive space (23MB vs. 11MB), a full install of the simulations to your hard drive may be the easiest way to find enough free memory. If you do a full install, you won't need to load CD-ROM drivers since the games will run entirely from the hard drive.

EMS (expanded memory)

Falcon Gold takes advantage of EMS if you have at least 1MB of EMS. EMS can be used in different ways: to run the ACMI, to load altitude and object data (for faster access), and to play the digitized radio messages. The latter three options can be turned on and off from the System Setup screen.

To check how much EMS you have, type **mem** [Enter] at the DOS prompt. The number next to "bytes free EMS memory" tells you how much available EMS you have. You will need a memory manager (such as EMM386, QEMM or 386Max) to convert extended memory into expanded memory. See your memory manager's manual for information on how to configure your system for expanded memory.

If you have only 1MB RAM total in your computer, we recommend using your memory manager to load other device drivers (mouse, CD-ROM, network) into high memory. You will be unable to hear the digitized radio messages or use the ACMI replay. You will be able to play in Communications mode, but unless your network drivers are loaded high, you can't play over a Novell NetWare-compatible network.

If you have 2MB RAM total in your computer, you can edit your CONFIG.SYS file to have 1MB (1024K) EMS. This will allow you to hear digitized radio messages and place the altitude and object data into expanded memory. If you don't have enough EMS remaining to use the ACMI, you may want to turn off some of the above three.

If you have at least 3MB RAM total, you should be able to load all the altitude and object data into expanded memory as well as hear the digitized radio messages. This will also give you enough EMS to use the ACMI. The more available EMS you have, the longer your ACMI replay can be.

Sound cards

If you have a Sound Blaster 16 or compatible sound card, you will need to choose the correct sound options from the System Setup screen. Then exit the game and restart your computer.

Troubleshooting *Art of the Kill*

Configuring your memory

The *Art of the Kill* video player requires 585K (599,040 bytes) of free conventional memory to run. See the sections "Finding free memory" and "Creating a boot disk" above if you are having problems freeing enough conventional memory.

In addition, the *Art of the Kill* video player requires 512K EMS or XMS (extended memory) if it's running in 256-color mode. If the video player is running in 15-bit (32,000-color) mode, it requires 1MB EMS or XMS. See the section "EMS (expanded memory)" above for more information on EMS. To configure your computer for XMS, your CONFIG.SYS file must have the line "`DEVICE=HIMEM.SYS`."

Configuring your video

The *Art of the Kill* video player requires your video card to support VESA mode 101h (256 colors at a resolution of 640 x 480). Please check your owner's manual to see if your video card directly supports this video mode in hardware. Your video card must have at least 512K onboard to support this mode.

If your video card does not support VESA mode 101h in hardware, you will need to load a VESA driver to run this Super VGA mode. Check your owner's manual to see if your video card came with a VESA driver. If not, you will need to contact the manufacturer for a VESA driver. See the list of manufacturers and their phone numbers below.

If you have problems running the *Art of the Kill* video player, we suggest rerunning the installer. Proceed through the installation until it has finished installing *Art of the Kill.* At the Video Player Configuration screen, select "Auto-detect" for "Video Card Type" and the installer will try to automatically determine which video card you have.

If that does not work, contact your video card manufacturer to make sure you have the latest version of their VESA driver.

The APIMODE utility

The APIMODE utility is installed into the AOTK directory on your hard drive. You can run APIMODE to help you determine which video card chip set you have. Type **apimode** [Enter] at the DOS prompt. The utility will display onscreen the name of a video card chip set. For example, if you run APIMODE on a Tseng ET4000-based video card, APIMODE will display "Video Chipset = ET4000."

With this chip set information, you may be able to choose a specific chip set for the *Art of the Kill* video player. Rerun the installer and proceed through the installation until it has finished installing *Art of the Kill.* At the Video Player Configuration screen, select "Special Video Setup" and choose a specific chip set from the list.

SmartDrive

Some video cards, such as those based on the Tseng ET400 chip set, will not play the *Art of the Kill* video correctly if DOS 6.2's SmartDrive is caching the CD-ROM drive. You will need to disable the CD-ROM caching or SmartDrive itself.

QEMM's Stealth feature

We do not recommend using QEMM's Stealth feature with the *Art of the Kill* video player. The Stealth feature uses video memory that the video player needs to run properly. The Stealth feature is turned on if you see "`ST:F`" or "`ST:M`" in the device line for QEMM.

15-bit (32,000-color) mode

The *Art of the Kill* video player can run in 640 x 480 x 15-bit (32,000 colors) for a much more realistic picture. Your video card needs to have 1MB onboard and support VESA mode 110 for 15-bit mode. Check your video card owner's manual to see if your video card supports this mode and to see if you need a VESA driver.

To configure the *Art of the Kill* video player for 15-bit mode, you will need to run the installer.

1. Insert *Falcon Gold* into your CD-ROM drive.
2. Change to your CD-ROM drive and type **install** [Enter] at the DOS prompt.
3. Proceed through the installation until the installer has finished installing *Art of the Kill* and the Video Player Configuration screen is displayed.
4. Select "Video Card Mode" and choose "640x480x32K."
5. Exit the installer.

6. Change to your AOTK directory and type `aotk` [Enter]. If your video card supports this video mode, you will see more realistic color when playing the tapes.

If you have a problem running in 15-bit mode, first try choosing a specific chip set from the list for "Special Video Setup." You may also need to contact your video card manufacturer for the latest VESA driver. You can always rerun the installer and switch back to the default mode "640x480x256."

If you need further assistance in using this 15-bit mode of the *Art of the Kill* video player, TMM directly supports this video mode. You can reach them Monday through Friday at (800)600-4866 5:00 AM to 5:00 PM Pacific Time.

Video card manufacturers

Below is a list of video card manufacturers and their phone numbers you can contact for updated video drivers.

Amazing Technologies	(714)255-1688	Headland Tech (Video-7)	(510)683-6290
Ahead Systems Inc.	(510)623-0900	Hercules Computer	(510)623-6030
Alpha Research	(512)836-0709	Infinity Manufacturing	(818)960-4509
American Research	(213)265-0835	Intercomp Inc.	(408)928-1588
Amptron International	(818)912-5789	Joindata Systems	(818)330-6653
Appian Technology Inc.	(408)730-5400	Metheus Corporation	(800)638-4387
ATI Technologies	(416)756-0718	Oak Technologies	(408)737-0888
Avance Logic	(510)226-9555	Orchid	(510)683-0300
Boca	(407)997-6227	Quadrant Components	(510)565-9988
Cache Computers	(510)226-9922	S-MOS Systems	(604)275-5151
Caching Technologies	(714)777-2818	S3 Inc.	(408)980-5400
Chips and Technologies	(408)434-0600	Sigma Designs	(510)770-0100
Cirrus Logic	(415)434-0600	SPEA (Video-7)	(510)683-6201
Creative Labs	(408)428-6600	STB Systems	(214)234-8750
DFI	(916)568-1234	Target Micro Inc.	(800)883-8830
Diamond	(408)736-2000	Tecmar, Inc.	(216)346-0600
Everex Systems	(800)821-0806	TMC Research	(408)262-0888
Focus	(510)657-2845	Trident Microsystems	(415)691-9211
Genoa Systems	(408)732-9000	Tseng Labs	(215)968-0502
Great Tek	(408)943-1005	Western Digital	(714)932-5000
Greenleaf International	(408)734-8888	Western Digital Paradise	(714)586-9950

Sound cards

If your ProAudio Spectrum sound card is set for Sound Blaster emulation, the installer will detect it as a Sound Blaster with the correct DMA, IRQ and Base IO settings. If your sound card is set for ProAudio sound, the installer will detect it as a ProAudio Spectrum card but the IRQ and DMA lines will show "-1" and the Base IO will show "ffff." Just click on "Quit" and your sound card will work.

Falcon Gold utilities

If *Falcon Gold* is freezing with a blank screen and you have an Acer motherboard, you need to use ACER.COM, a utility we supply to solve the problem. The utility is located in the \UTILS\ACER directory on your *Falcon Gold* CD-ROM. See the ACER.TXT file for more information.

If you are having video flickering problems and your video card is based on a Tseng ET4000/w32 chip set, you need to use the supplied replacement files to solve the problem. The files are located in the \UTILS\TSENG directory on your *Falcon Gold* CD-ROM. See the TSENG.TXT file for more information.

If you want greater control of your joystick, you may want to load TMSTICK.COM. For more information on this joystick utility, please read the TMSTICK.TXT file in the \UTILS\TMSTICK directory on your *Falcon Gold* CD-ROM.

If you have any questions about *Falcon Gold* or any of our other products, please contact Spectrum HoloByte Customer Support at:

- Spectrum HoloByte
  2490 Mariner Square Loop
  Alameda, CA 94501
  ATTN: Customer Support
- (510)522-1164
  9:00 AM to 5:00 PM Pacific Time
  Monday through Friday
- Fax
  (510)522-9357
- Automated technical support and fax back
  (800)TECH958
- Hint-line
  (900)773-HINT

America Online:
To reach our Customer Support board in the Industry Connection, press Ctrl K for "Go to Keyword." Then type `SPECTRUM` in the Keyword window. In addition to posting and reading messages, you can download files (demos, updates, troubleshooting tips, etc.) from the "Software Libraries." You can also send electronic mail to Customer Support at S HOLOBYTE. Call 1-800-827-6364 for membership information.

CompuServe:
To reach our Customer Support board in the Game Publishers B Forum, type `GO GAMBPUB` at any "!" prompt. Then select "Section 3" for Spectrum HoloByte. In addition to posting and reading messages, you can download files (demos, updates, troubleshooting tips, etc.) from the "Libraries (Files)" menu. If you're looking for head-to-head opponents, look for other *Falcon Gold* players in the Modem Games Forum by typing `GO MODEMGAMES`. You can send electronic mail to Customer Support at 76004,2144.

Call 1-800-848-8199 and ask Representative #142 for your free introductory membership and $15 usage credit. Besides online support of Spectrum HoloByte products, CompuServe offers many other services including communications, hardware/software support, reference libraries and more.

GEnie:
To reach our Customer Support board in the Games RoundTable, type `M805;1` at any "?" prompt. Then select "Category 18" for Spectrum HoloByte. In addition to posting and reading messages, you can download files (demos, updates, troubleshooting tips, etc.) from the "Games RoundTable Libraries." You can also send electronic mail to Customer Support at HOLOBYTE. Call 1-800-638-9636 for membership information.

Internet:
You can send electronic mail to Customer Support at 76004.2144@ compuserve.com.

Prodigy:
You can post and read messages in the "Flight Simulators" topic on the Game Club bulletin board (located in the Game Center area). You can also send electronic mail to Customer Support at TKNJ33A. Call 1-800-822-6922 ext. 556 for membership information.

Spectrum HoloByte Customer Support BBS:
To reach our Customer Support BBS, phone (510)522-8909 [8-N-1]. The BBS supports 300 baud to 14.4K (v.32bis) and Xmodem, Ymodem and Zmodem transfer protocols. After you are logged in, follow the onscreen prompts to sign on as a new user. The Customer Support BBS has message areas and file libraries (program updaters and game utilities).

If you are having problems with *Falcon Gold*, we can best help you if you are at your computer when you call and you have the following information handy:

- Version number or serial number of *Falcon Gold*
- Your computer's brand and model
- Your computer's BIOS brand and version number
- Total RAM installed in your computer
- Name and version number of your operating system (MS-DOS or DR DOS)
- Name and version number of your memory manager (such as QEMM or 386Max)
- Video card brand and model name
- Mouse brand and version number of mouse driver
- Sound card brand and model name
- Contents of AUTOEXEC.BAT and CONFIG.SYS files
- Type `MEM /C` [Enter] at the DOS prompt and copy down the onscreen listing

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If the disc should fail after the original ninety-day limited warranty period has expired, you may return the disc to Spectrum HoloByte at the address noted below, accompanied by a check or money order for the applicable replacement fee (please contact Customer Support for the exact cost), a brief statement describing the defect, and your return address. Spectrum HoloByte will replace the disc provided that you have previously returned your Warranty Registration Card to Spectrum HoloByte, and the disc retains the original product label.

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