Contents for Comet Busters!

Comet Busters! is a high-speed arcade game based upon the popular game A*teroids.

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Contents for Comet Busters! Shareware

Comet Busters! is a high-speed arcade game based upon the popular game A*teroids.

Topics

Commands

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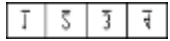
Press one of these buttons to start a new game with a given number of players. For example, press **1** to play by yourself, **2** to play with two players, etc.

Start/Stop Button

Start

If a game is not currently in progress, press the **Start** button to start a new game. The number of players in the new game will be the same as the number of players in the previous game.

If a game is already in progress, press the **Stop** button to stop the game and return to the attract mode.

Players Button

Press this button to set game options and control preferences for each player. A dialog box will pop up:

Players

Select a player number from the list box. All other fields in the dialog will change to reflect the settings of that player. Changing a field will affect the player that is highlighted in the list box.

Control

Select **Keyboard** for keyboard control, **Joystick** for joystick control if available. Press the **Setup** button to view/modify the keyboard assignments, or to calibrate the joystick.

Note: If the joystick selection is grayed, and the joystick is plugged in, you may have to go to the .INI file to activate the joystick.

Special Ability

These settings control what happens when a player presses the Special button on the joystick or keyboard. There are four options:

None Does absolutely nothing. Good to use as a handicap.

Hyperspace Creates a temporal flux around your ship, sucking it into a wormhole. The flux only lasts a few seconds, whereupon you are returned to normal space. The NAV computer tries to return you in a safe location, but all you could afford after buying your snazzy new ship was a VIC-20, so it's not always accurate.

Shields Generates a high-Tesla magnetic field so powerful that it would make the boys at Princeton weep. This field is concentrated around the perimeter of the spacecraft, and any matter that comes in contact with the field disintegrates. The shields draw a lot of power, so they get drained with time and with contact with matter. They eventually recharge, but at a very slow rate.

Disruptor This defense mechanism emanates a powerful reverse G-field from your ship,

causing all objects in the vicinity to be repelled from it. This field also has the side effect of increasing friction on your ship from the solar winds, so it also acts as a brake.

Cloak   Overloads the field inducers in your engine core, causing a time-space disturbance to form around your ship. Essentially, your ship disappears. This is really only useful when playing against other players, or if you dont want cronies to see you. When you fire, or when you press your Special button again, your ship comes out of cloak.

Attributes

The scroll bars at the upper-right corner of the dialog control certain aspects of your spacecraft which affect its performance. Drag the bar right for more, drag it left for less. However, when one attribute is increased, the others are decreased by a small amount. This way all the attributes balance evenly.

Bullet Speed   Controls how fast your bullets go. Careful; if they go too fast they might miss small objects.

Thrust   Controls the acceleration of your ship.

Maximum Speed   Controls the aerodynamic properties of your ship. The further right this bar goes, the less friction.

Rotation Speed   Controls how fast your ship turns right or left.

Special Ability   Depends on what special ability you have:

   Hyperspace   Controls how good the NAV computer is at picking a safe location to come out of hyperspace.

   Shields   Controls how fast the shields recharge.

   Disruptor   Controls the strength of the negative G-field.

   Cloak   Controls how long you can stay cloaked.

Pressing the **Reset** button (the one on the screen, not the one on your computer!) sets all attribute values to the midway point.

Game Button

Press this button to set game options that affect all players.

Difficulty

Sets the difficulty level of the game. Settings are **Simple**, **Challenging**, and **Impossible**. The higher the difficulty level, the more rocks are present, the faster the flying saucer goes, and the more cronies are hatched.

Stars in Background

Check this box if you want a background of colorful stars. Unchecking it leaves only black space, and improves performance by a small amount.

Fragmented Explosions

Check this box if you want objects to turn into a cloud of particles when exploded. Explosions slow down the system a good bit, so if you have a slow 286, you may want to deselect this option.

Pause When Inactive

If this box is checked, the game will pause when you switch away from the program using Alt-Tab or some other method.

Deadly Bullets

Checking this box turns all the players' bullets to red, so that they can kill each other.

Tournament Mode

When this box is checked, a game started with two or more players will be a *tournament game*. In a tournament, you are less concerned with blasting comets and aliens and more concerned with destroying your fellow players. Tournament games differ from normal play in the following ways:

1. There are no enemies except for rocks (and of course, the other players).

2. Shooting the rocks does not make them blow up. Instead, they bounce off of your bullets, so you can push them around the screen.

In a tournament, score is kept in a different manner. The last player left at the end of each round gains a point. The player with the most points at the end of seven rounds wins the game!

Full-Screen Mode

Check this box to put the game into full-screen mode. You cannot change this setting while a game is in progress.

Note: Full screen play is currently not supported except under Windows 95.

Remote Play

These options allow you to play Comet Busters! with a friend over a modem, direct cable connection, or over the Internet!

Dial/Answer

> *For modem/direct play:* Press the **Dial** button to initiate a call, and press the **Answer** button to wait for an incoming call.

> *For network play:* Press the **Dial** button to try to connect to the host specified in the **Remote Setup** dialog, and press **Answer** to wait for an incoming connection from any computer. Both users may press **Dial** if they know each other's Internet addresses.

Setup

Configures your remote connection. See the Remote Play page for details.

Update interval

This setting controls how often information is exchanged between the two computers during a game. The default is 1, which means information is exchanged after every frame. If your remote game slows down unreasonably, try increasing this value by 1 until you get the result you want. The higher this value, the less load is put on the connection, but the slower your controls will respond. Any value above 4 is generally unplayable. But one day, everyone will have fiberoptics coming into their home, right?

Remote Play

You can link up Comet Busters! to another computer over a modem, direct cable connection, or over a TCP/IP network (the Internet!) First, click on the **Game** button. Then press **Setup**.

Connection

- ○ Modem
- ○ Direct
- ● Network

You must first decide what type of connection you are going to use. Choose **Modem** for communication between two modems over a phone line, **Direct** for communication via a null-modem cable, or **Network** for communication over a network with the TCP/IP protocol.

COM port

- ○ COM1
- ○ COM2
- ● COM3
- ○ COM4

Init string

`ATE0`

Dial string

`atd`

Remote machine name

`lss.hamco.com`

IP port number

`50001`

Update interval

`1`

Modem/Direct Setup

Choose the COM port that is hooked up to your modem or serial cable. For a modem connection, you also have the option of changing the initialization string and the dial string. The default baud rate is 9600, but can be changed via the .INI file.

For modem play, the number of the computer you are trying to dial should be appended to the dial string. For example, to call 555-1212, you would enter `ATDT 555-1212` in the **Dial String** field. Refer to your modem manual for setup and dialing commands.

Network Setup

These options are for play over a TCP/IP connection:

Remote machine name - This specifies the name or IP address of the machine you are attempting to connect to. You may specify either the name of the machine, or the IP address directly (examples: *192.168.0.1; piglet.hamco.com*).

IP port number - This specifies the number of the port through which both of you will connect. This number must be the same on both machines. The default value is 50001.

Things to consider during a remote game

*   While engaged in a remote game, you cannot change the game parameters via the

Game button (the **Ok** button is disabled), or change your player's attributes. You must make these changes while no game is in progress, then start a game.

* The game parameters for a game are set by the player who starts the game. This includes difficulty level, tournament mode, deadly bullets, frame rate, and update interval.

* You can only make a connection between two computers, but you may have more than one player at each computer. Here's how: to play three players on your computer against one player on the remote computer, simply press the **3** button at the top of the screen. To play two players against two players on the remote, press the **2** button, then have the other computer press the **2** button. You may only have four players total.

* You may **chat** with the remote player(s) by using the *F1-F3* keys. *F1* is player 1's chat key, *F2* is player 2's, etc. Type the F? key and then enter your message followed by *Enter*. You may only use alphabetic characters. Type *Esc* to cancel a message.

Pause Button

Press the **Pause** button to pause the game. Then when you are ready to continue playing, press the **Continue** button.

Sound Button

Press this button to toggle sound effects on and off. When sound is enabled, the button should read **Sound**. When sound is disabled, the button will read **(sound)**.
If the program can not access a sound device, this button will be grayed.
Note: If a suitable wave device is not found, the program will attempt to play sounds through the PC speaker.
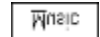
Music Button

Press this button to toggle music on and off. When music is enabled, the button should read **Music**. When music is disabled, the button will read **(music)**.
If the program can not access a MIDI device, this button will be grayed.
This button is also grayed for the Shareware version of the game.

Rules of the Game

Rules!?!? Don't tell me you haven't seen this game before...!

Okay, okay, the premise is very simple. Fly your spaceship around and shoot anything that moves. Your spaceship can turn left, turn right, or thrust forward. It can shoot up to four bullets at once. It can optionally be equipped with special abilities such as hyperspace, shields, a cloaking device, or the Disruptor.

Here are the various objects in the Comet Busters! world:

Your spaceship. No neon ground effects, no hydraulic jack, no subwoofer in the trunk. Just your basic spaceship with a V-6 and a broken AM radio.

A *comet chunk*. If these things can make a hole in Jupiter, just imagine what they can do to you! When you hit a big one, it turns into two medium-sized ones, and you get 20 points. When you hit a medium-sized one, it turns into two little ones, and you get 50 points. Little ones get you 100 points each.

A *flying saucer*. The B-movie variety with the rotating antenna on top. You may think he's taking aim at you, but he's really shooting in random directions. If you bag him you get 250 points.

Cronies. These guys live in some of the larger comet chunks, and when you destroy their home, they come running after you. They look cheerful, but they really are quite deadly. They home in on the closest living thing, that is, your spaceship or the saucer. Pop off one of these and you get 200 points.

After you blast away all the rocks in one level, you get promoted to the next level, where the rocks are faster and more plentiful, and so are the aliens.

Multiple Players

It's fun to play with more than one person. When you shoot somebody else, it makes a satisfying *klunk* sound and knocks him temporarily out of control (unless the Deadly Bullets option is selected, whereupon the other player snuffs it). You get no points for this, but it is satisfying enough anyway. It is an essential strategy in Tournament Mode.

If two players collide, they both disintegrate. However, if one player hits an (unshielded) player with his shield, the other guy gets wasted. If two players hit each other with their shields, strange and chaotic things happen.

The ships are different colors depending on which player you are:

Player 1: Blue

Player 2: Garnet

Player 3: Green

Player 4: Gold

The COMET.INI File

The COMET.INI is located in the same directory as the COMET.EXE file, and contains various settings for customizing the game. Most of these settings are accessible through the dialog boxes in the program, but a few are not:

[Game] section

```
GameSong=[filename.mid]
EndSong=[filename.mid]
HighScoreSong=[filename.mid]
```

These settings specify MIDI files to be played through a sound device while the game is playing. **GameSong** is the song to be played while the game is in progress, **EndSong** is to be played at the end of the game, and **HighScoreSong** is played when a player achieves the high score.

If you use a wildcard in any of the filenames, the program will pick a MIDI file at random from the files specified by the wildcard. For example, `GameSong=c:\windows\*.mid` would cause any of the MIDI files in the C:\WINDOWS directory to be played.

```
FontName=[font]
```

This setting specifies the name of the font to be used for all messages on the game display.

```
NumWaveChan=[# of channels]
```

This setting controls the number of channels the WAVEMIX driver may use. This is equal to the number of voices the driver can play simultaneously. If your sound skips, you may need to reduce this value.

```
MsecPerFrame=[milliseconds]
```

This setting controls how many milliseconds elapse between each frame. If unspecified, the default value is 42 (about 24 frames/sec).

```
PktTimeout=[milliseconds]
```

During network play, Comet Busters! uses the unreliable UDP protocol. This means that packets may occasionally get lost or sent out of order. This setting controls how long your computer will wait for a packet before saying "hey, you got anything for me?" to the remote computer. This setting only applies during network play and defaults to 1000 milliseconds.

```
Backdrop=[filename.bmp]
```

This setting gives the filename of the background bitmap in the game. The default is cometbkg.bmp. As in MIDI filenames, wildcards may be used to select a random backdrop.

```
TournamentLives=[number]
```

Specifies the number of lives each player receives in Tournament Mode.

```
TournamentLevels=[number]
```

Specifies the number of rounds in a game in Tournament Mode.

```
Joystick=[something]
```

This setting is no longer used.

[Screen Saver] section

Many of the settings in the [Game] section are duplicated here for use with the Comet Busters! Screen Saver (registered version only).

Copyright

COMET BUSTERS!

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DISCLAIMER:

HAMCO Software, and the author, Steven E. Hugg, make no guarantees as to the correctness or applicability of this software. We are not responsible for any damage, consequential, incidental, or transcendental, caused by the use or misuse of this software.

Comet Busters! Shareware may be distributed freely provided that the files in the archive are distributed as a group, as in a single archive, and that the files are not modified in any way.

Comet Busters! was written with Borland Pascal 7.0 and Delphi 1.0. The graphics were created with the BOB ray tracer from the book *Photorealism and Ray-Tracing in C* by Christopher D. Watkins and Stephen B. Coy.

BOB is Copyright 1988,1992 Christopher D. Watkins and Stephen B. Coy

Contacting the Author

Comet Busters! was written by Steven Hugg.

You may contact him by:

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     hugg@pobox.com

World Wide Web:

     http://pobox.com/~hamco

Snail Mail:

     Steven E. Hugg

     2482 Vineyard Lane

     Crofton, MD   21114

Carrier Pigeon:

     [not yet implemented]

Controlling Your Ship

Here are the default keys for each player. They may be altered by pressing the **Players** button at the top of the screen.

	Plyr 1	**Plyr 2**	**Plyr 3**	**Plyr 4**
Turn left	Left arrow	A	Num 4	
Turn right	Right arrow	D	Num 6	
Thrust	Up arrow	S	Num 8	
Fire	Space bar	Left-Shift	Num 0	
Special	Right-Ctrl	Left-Ctrl	Num 2	

Also, when you have been killed and are waiting for your ship to return, you can press both the Fire and Special buttons at the same time and your ship will return immediately.

If you are using a joystick, here are the motions:

Turn left	Push joystick left.
Turn right	Push joystick right.
Thrust	Push joystick forward.
Fire	Push joystick button #1 (usually the trigger).
Special	Push joystick button #2.

There are also *chat keys*, *F1-F3*. See the <u>Remote Play</u> section.

Known Defects

- The game does not look at all swell in 16-color mode. Sorry.
- The little spaceships under your score should be the color of your ship, but under Windows 95 they arent. (Did I hear someone say hack?)
- The sound may sometimes skip on slower computers. Try reducing the **NumWaveChan** parameter in the COMET.INI file or changing the line **WaveBlockLen=** in your WAVEMIX.INI file.
- I have heard of people having problems using two joysticks with the game. If this gives you a problem, let me know and I'll try to fix it.

If you find any other problems, or have any suggestions, please contact me <u>here</u>.

Registration

If you enjoyed playing this game, then you should register to receive new versions of the program and other goodies! The membership fee is only $9.00 ($10.00 non-U.S.). Here's what you get when you join:

* The latest version of **Comet Busters!**

* *Music* and special *cheat codes*!

* The **Comet Busters! Screen Saver**!

* **Nuclear Winter**, another classic arcade game with neat graphics and digitized sound.

* *FAME!* Your high scores will be eligible for entry into the **Comet Busters Immortals** page on the Internet (`http://pobox.com/~hamco/immortals.html`).

* Support and notification of updates via e-mail.

* <u>Full source code</u> to both **Comet Busters!** and **Nuclear Winter**, that will work with Borland Delphi.

Click here for a <u>registration form</u> and send it to:

HAMCO Software

2482 Vineyard Lane

Crofton, MD   21114   USA

Source code information

Some of the modules you will receive include SPRITE24, which is a powerful Windows object-oriented sprite library that supports collision detection and fast WinG graphics. IMATH is a collection of routines and macros for performing integer math, including fast square roots. JOYSTICK is a unit for using the joystick in Windows apps. KEYWND is a unit that displays a keyboard on the screen and lets the user choose key assignments. MODEM and NET are libraries for exchanging information over a serial connection and network. There are about 30 modules altogether, all written with Borland Delphi 1.0.

I will grant you the right to use and modify any of the program's source code for any personal or commercial application, provided that the source code is not distributed. This does *not* give you the right to use the data files, however.

Comet Busters Registration Form

Click 'Print' to print this form to your printer, then fill it out.

Name

_____

Address

_____

_____

City   State   Zip

_____   _____   _____

Country (leave blank if USA)

_____

E-Mail address (if available)

_____

I would like to be notified of new updates via e-mail (check one).

                  Yes   No

U.S. customers: Send $9.00 cash, personal check, or money order.

Non-U.S. customers: Send a $10.00 check drawn on a U.S. bank, or a $10.00 international postal money order in U.S. currency.

Make checks out to HAMCO Software. Not responsible for lost cash. Expect 1-2 weeks for delivery.

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