OPERATION: inner space™

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Joystick Settings

General
Inner Space can be controlled from the keyboard or a 2-axis joystick with 2-4 buttons.   The joystick is more intuitive to use, but the keyboard gives you better control over your ship, especially for tight maneuvers such as racing.

Setting Up the Joystick
Before you can use a joystick in the game, you must calibrate it in the Joystick dialog (accessed from the Game Setup dialog).   The joystick should only need to be calibrated once.   Calibrate again if you get a new joystick.   To calibrate, first press the Calibrate button.   You will be instructed to put the joystick in the upper-left position and then press a joystick button.   Next, put the joystick in the lower-right position and press a joystick button.   The calibration should then be complete.

Testing the Joystick
If the joystick is calibrated, you can test it's range of motion and the joystick buttons.   The crosshair shown on the Joystick dialog should move in response to the joystick position.   Make sure that the joystick uses the full range of the test area.   If you press a joystick button, the corresponding pushbutton should appear pressed and a sound effect associated with the function of that button will play.   For example, if you press the fire button, the laser gun sound should play.   When the sound for a joystick button is played, the crosshair will move slightly.   This is normal and not a problem with the joystick.

Programming the Joystick
Each joystick button can be programmed with a function.   By default, button 1 is used to fire your gun and button 2 is used to fire a weapon system.   You can change the functions of these buttons to other things such as turbo-thrusting, calling the ambulance, and choosing a new target.   This feature is most useful if your joystick has 4 buttons.

Your Mission

Inner Space is a world within Windows and inside your imagination.   Your computer has been invaded and all the programs set loose to feed on your systems' resources.   Your mission is to go inside your computer and capture or destroy all icons before facing the final challenge and returning from Inner Space.   The world of Inner Space is dynamically generated from your hard disk as you play.   Hazards, competitors, and an Inner Demon get in your way, but there are friendly ships to help you out.   Although icons are the central goal, interacting with other ships and conquering the demons are increasingly important challenges to face as you go deeper into Inner Space.

Installing

General

To install Inner Space, insert the master disk in the floppy drive and Select the Run.. option from the File Menu in File Manager or Program Manager under Windows.   Type "A:\INSTALL" on the command line if the master disk is in the A: drive or type "B:\INSTALL" if the master disk is in the B: drive.   After selecting the options to install and clicking the 'OK' button, the Inner Space files will be decompressed onto your hard drive.

For a valid installation, install from the master disk (not a backup) and do not write-protect the master disk.
The master disk can be validly installed to only one computer.   To install to a different location, see 'Moving Inner Space' below.   Once Inner Space is installed, you can make one valid backup with the Inner Space backup utility.

For full instructions on making a Backup, Moving Inner Space to Another Computer, Deinstalling, and ReInstalling, please see the printed Inner Space manual.

QuickStart

Learning From the Demo

Inner Space can be played with just 4 keys, so you can just jump in and play, but we suggest that you watch the demo to see how the game works.   The computer demo pilot will describe what he's doing and why, so watching the demo is a good way to see how to play.

Each time the demo runs, the demo pilot continues his previous game so that he eventually shows advanced play and different scenes that appear.   Pressing 'S' during the intro will allow you to start a new demo and choose the ship you will see. Press 'C' during the intro to see a continuation of the most recent demo game.   At the end of the intro, the demo plays for a few minutes and then returns to the intro again.

While watching the demo, press F1 to investigate the online help system which describes everything in Inner Space. You can press ESC to stop the demo and return to the intro at any time.   When you are ready to start playing, press ESC from the intro.

Your First Game!

When you start playing Inner Space, just get used to flying around and capture or destroy the icons and fuel cans.   If you don't like an application, enter its directory and blast its icons.   Later in the game, other ships show up to compete for the icons and more hazards get in your way.   Press 'ESC' from the intro to start a new game.   On the Restore Game dialog, select "NEW GAME" and press 'OK'.   On the New Game dialog, select a ship to fly and press 'OK' to start the game.

To make the game easier:
> ***Set Difficulty to Gentle***
> ***Slow the game down***
> ***Set to 1/2x graphics***
> ***Turn on Game Menu***

Alt-G opens the Game Settings dialog where you can set the difficulty, game speed, and scale level. Press the 'Display..' button on the Game Settings dialog to show or hide the game menu.   The game menu shows all commands you can give during the game.

Although ship interactions are an important part of the game, you can initially just play Inner Space as a shoot-em-up. It is easy to get damaged in Inner Space, but you can call the Inner Space ambulance to get repairs or buy weapons. The more icons you acquire, the more invincible you can make your ship.   The basics of the game are turning, thrusting, and shooting.   In your first game, just get used to flying around, capturing icons (by flying into them), avoiding rocks, and shooting at things.   See Joystick Options for using a joystick with Inner Space.

Thrust	UP ARROW
OverThruster	CTRL+UP ARROW
Turn	LEFT/RIGHT ARROW
Shoot	SHIFT or SPACE

After playing for a short while, you will probably get your ship damaged, requiring repairs from the ambulance.   Icon resources are used to pay for repairs and purchasing more weapons, so getting good at capturing icons is an essential part of playing.

Brake	DOWN ARROW
Fire Weapon	Z or RETURN
Call Ambulance	H
Online Help	F1
Change Target	T
Exit Game	Alt-X

The main keys to use are in two clusters: (Shift, Z, Ctrl) and (Arrow keys).   There are also key commands for communicating with other ships and targeting various types of objects, but the keys listed above are all you need to get started.

Playing Inner Space: General

New Game
On the New Game dialog, you can specify your pilot name for use in the game, as well as the ship you wish to fly and the drive you wish to enter.   The directories on your hard disk form the game world of Inner Space, so the drive you choose to play on determines what will be in Inner Space.   Once you select your New Game options and click 'OK', you will see your ship come up on a launch pad and fly into Inner Space through a computer monitor.   You will then be presented with the navigation window where you can select a directory to enter.

Navigating
The Navigation window shows the directories available for you to enter.   Each directory is described as you scroll the directory list, indicating how many icons are available and whether you have visited that directory before.   Most programs have just one icon, but some programs contain many icons to capture or destroy.   After choosing a directory and clicking on the 'Enter' button, your ship appears through a gate into the directory you chose.   Inside each directory are the icons from programs in that directory, various hazards to avoid, and possibly other intelligent ships to deal with.

Completing the Game
There is more than one way to complete Inner Space.   Since all the programs on your hard disk are running free, the straightforward way to finish the game is to capture or destroy all icons in all directories.   When all icons have been dealt with, you can enter the directory called "Demon's Gate" to face your Inner Demon and return from Inner Space.

A less obvious way to complete the game is to collect all 4 Noble Weapons, which can be used in the "Demon's Gate" directory to complete the game without capturing or destroying all icons.   Noble Weapons are only attainable from struggle with the Inner Demon who periodically sucks you into a black hole to do battle.   Since you cannot control when the demon will pull you into his black hole, it is difficult to finish the game this way. See Inner Demon for more detail.

Window/ Full Screen
The game defaults to playing full-screen to create a more involving game experience, but you can switch to playing in a window by double-clicking in the middle of the screen.   Double-clicking again in the Inner Space window brings it back to full-screen.   There is no performance difference between playing full-screen or in a window.

Status Displays
The status display is the lower portion of the screen or Inner Space window that shows your score, targeting information, radar view, damage status, play time, and the current weapon.

Targeting
The Target display shows the direction from your ship to targeted objects such as icons or other ships.   A ship which is not close enough to be visible is easier to follow when it is targeted.   Also, you can direct other ships to act upon the object you have targeted (see Sending and Receiving Commands).

For example, if an icon is targeted and the direction arrow points to the upper left, you would need to fly to your upper left to get to the specified icon.   If your detail level is set to High or Highest, you will also see a small starfield in the target display indicating the direction and speed that the targeted object is moving.   If you target a ship, the target display shows the ship's team and what it thinks about you (friend/neutral/enemy).   The text is color coded so that blue means friendly, gray means neutral, and red indicates an enemy.

By pressing 'T', you can change the current target.   Below are a list of keys to target specific objects.   *Pressing Ctrl+ a targeting key will target the closest object of the specified type.*

T	Any target
R	Ship target
I	Icon target
V	Virus Target
Y	Hazard Target
U	Defender Target

Messages

The Target display can also show messages from other ships or the Inner Space ambulance.   As you play the game, the ambulance will send status reports on your performance and warnings about imminent danger.   You will also receive messages from other ships asking for help, reporting their progress, or challenging you to a fight. When messages appear, they are shown for a few seconds and then the display switches back to targeting information.   If a message is shown, you can switch to targeting by pressing 'T'.   If a target is shown, you can flip back to the most recent message by pressing 'M'.

Radar Screen

The radar screen allows you to see a miniature picture of the Inner Space game world.   Even cloaked ships appear on the radar display, and the objects are color-coded as follows:

Grey - Rocks and Hazards	Ships
Yellow - Entry/Exit Gates and Ambulance	Blue - Friendly
Blue - Icons	Grey - Neutral
Red - Fuel or Missiles	Red - Enemy

The radar display can be zoomed to show more or less of the world at once.

Damage Display

The damage display shows the status of your ship's Engine, Guns, and Thruster systems, as well as your wings and/or cloaking system if the ship is so equipped.

Green - Excellent condition
Amber - Damaged, but fully operational
Red - Seriously damaged
Blinking Red - The system is almost completely destroyed
Grey - The system is completely out

If your ship has wings or a cloaking system, it will show up as the 4th system on the damage display.   If your ship has both wings and a cloaking system the 4th display will show cloak, although it will apply to both the wings and the cloak.

Weapon Display

If the current weapon is a missile, the weapon display shows how many are left.   Most ships have an initial weapon that they start with in the game.   By trading icon resources for credit in the ambulance, you can reload existing weapons and buy new ones. If you have more than one weapon, pressing 'TAB' will allow you to change the current weapon.

Online Help

Inner Space comes with a context-sensitive online help system that describes the game world and everything in it. There is a dynamic help system with live information about the game world and a static help system with the information in the manual.   The dynamic help system will have a description of the ships, teams, hazards, and other objects in that wave.   You can also look up key commands in the help system.   Two pages of dynamic information are available on each ship currently in the game showing it's technical statistics, damage levels, current behaviour and attitudes to others.

Double-clicking on the status display opens online help as follows:

Score - high-score list.
Target Display - shows information about the targeted object.
Radar Screen - shows an overview description of the current game.
Damage Panel - shows detailed information about your space ship.
Weapon Display - description of the current weapon and how to use it.

Icons

Capturing

Capturing icons is your main task since all icons must be captured or destroyed before you can return from Inner Space. Also, captured icon resources can be exchanged for services and weapons in the Ambulance.   In later waves, icons protect themselves with defenders (See Defenders).   Other ships also compete with you for the icon resources.

To see a list of all icons in the wave, open the Icon Watch window (Alt-I).   Pressing Alt-I again will close the Icon Watch.

Destroying

Destroying virused icons is legal, but destroying non-virused icons is considered criminal vandalism (See 'Laws'). Methods of destroying icons include burning, cracking, smashing, freezing, and melting using various weapon systems.

Icons which are frozen have icicles on them and cannot be captured unless first thawed.   Icons can be thawed by shooting them with fire or otherwise heating them up.

Icons which are covered by a green slime have been infected by a computer virus!   If you capture a virused icon, you do not gain any resources from the icon and your ship will fly out of control and bash into things while your auto-repair system purges the virus.   Normally it is illegal to destroy icons, but virused icons have no value and are legal to destroy.

Defenders

Defenders are small high-speed ships that are created by icons as a defense against attacks.   At higher waves, more defenders are created by icons and they are more aggressive in their defense of their icon.   Just flying through the defenders to capture an icon can be tricky, but if you attack the icon, the defenders will also come after you. Defenders are relatively weak and simple-minded, but they can easily get in the way and a swarm of them are dangerous.

If you capture an icon with defenders, the defenders become yours and they will now orbit and defend you!   Once you have defenders, you can just let them orbit you as a shield, or you can order them to attack or defend targets. The following commands apply to defenders you have acquired:

Alt-A - Attack my target
Alt-D - Defend my target
Alt-E - Exit the Wave
Alt-H - Help me (defenders will come back and defend you)

Hazards

Viruses

Computer viruses look like plasma balls and lurk in some directories of Inner Space.   Viruses infect icons with lightning bolts and strike any object that gets too close.   After striking an object, the virus's charge is depleted, making it less dangerous to approach.   Over time, they recharge to a dangerous level again.   The amount of charge in a virus is indicated by how fast the electricity moves inside the virus.

All ships oppose viruses and even your enemies might help to destroy a virus.   Destroying virused icons is a legal action.   See 'Destroying Icons' for more detail on destroying virused icons.

Resource Management

General
It is easy to get your ship damaged in Inner Space, but the Ambulance is only a keypress away 'H'. Repairs aren't free though.   Inner Space Command wants you to capture icons, so icons are traded in for credit towards repairs.   If you have extra credit, you can buy new weapons for your ship.   Some weapons are offensive, some defensive, and some have special tactical advantages.

The most essential services (repairs) can be bought even if you have no credit left, but it is up to you to get some icons to build up your credit or eventually the ambulance will cut you off and no longer do even basic repairs. Although it is possible to initially ignore the resource management part of the game, eventually you will need repairs and therefore need to go after icons to stay well-stocked.

Ambulance
All ships make use of the Inner Space ambulance service.   Icon resources are exchanged for credit when you land in the ambulance.   Credit can be used to buy repairs and new weapon systems.   Only items that you can afford can be purchased, except for basic repairs and refueling, which can be purchased even if you are in debt to the ambulance. If you go far enough in debt, the ambulance will not come at all, so it is essential that you collect icons as you play.

The ambulance lets you both buy and sell weapons.   If you are in desperate need of repairs or find a weapon not very useful, you can sell one or more of the weapons you have acquired.   To avoid the cost of repairs, you can use your ship's auto-repair system to fix some damage.   Your ship uses fuel to slowly repair damage over time while you are playing. If your fuel runs low (15%), the auto-repair system shuts off.

If you come into the ambulance while your ship is on fire (almost dead), you will be forced to buy a new body to continue playing the game.   A new body is costly, but you will always be allowed to purchase a new body if you get into the ambulance when your ship is dead.   If you have enough credit, you can buy a new body at any time. When you buy a new body, you can choose any ship body, even those from other teams or enforcers.   Purchasing a different body does not change your team or who you are in the game, just appearance and flight characteristics.

Powerups
Handling characteristics for all ships are set in the Ship Factory, but those features can be improved by buying powerups in the ambulance.   Armour for each ship system (Engine, Gun, Thruster, Wings) can be improved and the ship's gun can be made more powerful with powerups.   There are 4 stages of powerup available for each system, each more expensive than before.

Dealing With Other Ships

Sending and Receiving Commands
Although capturing and destroying things is the basis of Inner Space, sending and receiving commands allows you to be more efficient and have more interesting interactions with other ships.   Almost anything that you can do yourself, you can command another ship to do for you.   If there is a friendly ship around, you can command him to Capture, Attack, or Defend a target, to come Help defend you, to Exit the wave, or to report on his current activity.   You can also challenge other ships to fights.   Any command that you send out is really a request.   If there is a ship that is friendly enough and is not too busy, he will do as you ask.

The following commands can be given to ships:
Ctrl-A   Attack my target
Ctrl-D   Defend my target
Ctrl-H   Help Me (defend me and/or attack my enemy)
Ctrl-F   Challenge the targeted ship to a fight
Ctrl-E   Exit the wave
Ctrl-S   Self-preserve (directs the ship to do what it thinks is appropriate)

Strategy Mode
Inner Space can be played in either Action or Strategy modes.   The default is Action mode, where you do all the flying, shooting, weapon selection, etc.   In Strategy mode, you simply give commands and your ship does them for you.   For example, if you wanted to attack an icon in Strategy mode, you would target the icon and press 'A' to start the attack.   Your ship will attack the icon until it is destroyed or you give another command.

Strategy mode is an easy way to get used to the game if you aren't used to playing action games or would simply rather give commands.   Press F12 to toggle between Action and Strategy modes while you are playing.   The Strategy mode commands are listed below.

Strategy Mode   Meaning
Q   Capture my target
A   Attack my target
D   Defend my target
G   Refuel (get gas)
S   Self-Preserve (defend oneself)
E   Exit the wave

Watching Ships
There are often occasions when it is useful to keep a watch on another ship so that you can tell where it is and what it is doing.   For example, if you give a teammate a command to attack another ship, you can open a watch on your teammate to monitor his progress.   When fighting with an enemy, it is useful to keep a watch on your enemy's movement, direction, and actions.

To open the watch window, press 'W' or Ctrl-W.   Each time you press 'W', the watch changes to a different ship. Pressing Ctrl-W while the watch is up will bring down the watch window.   To watch one of your defenders, press Alt-W.

Teams
The intelligent ships are organized onto 8 teams, each with unique characters and behaviours.   Whatever team the user decides to play on, there will be teammates, allies, and enemies to deal with.   These relations aren't fixed, but depend upon the player's actions. Ships are governed partly by their own behaviours and attitudes, but also by team behaviours.

The ships on a given team do not look identical, but they generally look like what they are.   For example, duck-billed Platypuses and Teddy Bears are both Fuzzy Ones, whereas the Jaguar is a Predator and the Screaming Rod is a Speed Demon.   When you target a ship, the targeting display shows their team and how friendly they are to you.

Avengers
Predators
Fuzzy Ones

Violence & Consequences

There are friends, enemies, and neutral characters in the game, but these relations are changed by what you do. For example, if you attack a ship, his friends start to not like you and a ship you have never seen before could come after you for revenge.   Conversely, if you defend a ship from attack, he and his friends are more likely to help you the next time you are in trouble.

Inner Space will be as violent as you make it.   There are always enemies to deal with and many ways to destroy things, but the game's violence depends on you.   If you are violent, the game responds with violence, but if you don't try to kill anyone, the game gets less violent.   Since users often get annoyed with their programs, it is fun to go and blast the icons for Excel, Word, or any other program you use often.   Icons can be torched with fire, frozen with snow, cracked with shots, blown up with missiles, zapped with lightning, and melted by hot rocks.

While you can be as violent as you want in Inner Space, there are consequences to deal with.   The most obvious result of violence is that ships you attack don't like you anymore and their friends won't like you either.   In fact, if you kill a ship, a teammate of the victim may eventually come seeking revenge against you.   Potentially more serious are the Inner Space police force, the Enforcers who enforce the laws of Inner Space.

For full details on the best strategy to use when playing Inner Space, please read the printed game manual sections on Dealing with Other Ships.

Special Ship Systems

Auto-Repair
Most ships have an auto-repair system that will repair ship damage over time.   If a wing is torn off, your ship cannot repair that, but anything else can be repaired by the ship itself.

The auto-repair system is always in operation and uses fuel to slowly repair damage while you are playing. When a damaged system is fully repaired, a message appears on your target display indicating the completion of that repair. If you wish to use the auto-repair system to avoid paying for repairs from the ambulance, make sure you have plenty of fuel and that you avoid further damage while waiting for repairs to occur.   If your fuel runs low (15%), the auto-repair system shuts off, since basic ship operations take priority.

Weapons
If you have enough credit, you can purchase new weapons in the ambulance.   Some weapons are purely for offensive or defensive use.   For example, the Wildcard weapon turns the nearest threatening missile into a random harmless fruit.   This is a powerful defense against all forms of missiles, but it does nothing for offense.   Some weapons, such as lightning, are easy to target at a specific object but others, such as the Heat Seeker Missile, can come back and blow up in your face.   There are also special Noble Weapons that can only be attained through battle with your Inner Demon (see Inner Demon and Noble Weapons).   You will have to experiment to find out how to best make use of the various weapon systems, some of which can be used for other things besides destroying things.

Cloaking
Cloaking is a ship characteristic, set in the Ship Factory Handling dialog, that some ships have and can use to tactical advantage.   When a ship is cloaked, it is invisible to other ships giving it a big advantage.   The downside of using the cloak is that objects cannot be captured and weapons cannot be fired (other than the gun) while cloaked. Also, the cloaking system uses fuel.

The cloak is activated or deactivated with the CAPSLOCK key.   To make effective use of the cloak, you must be careful to be sneaky.   If you fire your gun or run into an object, other ships will be able to guess where you are.   A good way to use the cloak is to sneak up on something, then uncloak when you are very close.   If your ship gets damaged, it may drop out of cloak spontaneously.

Shielding
Shielding is a ship characteristic, set when a ship is added to the Factory list, that can be used to protect a ship from damage.   Only ships (such as the Transformer) drawn with multi-frames for shielding can be set to have the shielding attribute.

The shield is activated or deactivated with the CAPSLOCK key.   When shielded, the ship can withstand much more damage than normal, but it cannot capture objects or fire weapons (other than the gun).   Unlike the cloaking system, the shield does not use fuel.

Perspective Shifting
If there is a teammate in the wave, you can hit 'P' to trade places with his ship. Hit 'P' again to come back to your own ship.   When your ship is almost dead, perspective shifting allows you to continue the game in another form. Perspective shifting is useful for avoiding death, using different ships for different situations, and just for the variety of trying a different ship body.   For example, you might want to perspective shift to a teammate that has cloaking or a weapon that you need to combat a specific enemy.   Perspective shifting can be done anytime there is a teammate in the wave with you.

High Scores

Scores

As you play Inner Space, you accumulate a score based on your performance.   Your score is shown in the lower left of the status display while playing.   You can see how you rank compared with all other recorded games by double-clicking on the score, bringing up the score list in the online help.   A description of the associated game accompanies each high score.   Double-clicking on a score in the score list brings up a description of that game.

Saving and Restoring Games

You can save and restore games that may go on for days or months. You can hit Alt-S during a game to save it, bringing up a dialog that allows you to name the game.   Alternatively, you have the option of saving a game in progress when exiting the game (Alt-X-S).

Even if you do not manually save your game, the current game is saved at the end of each wave in a game file called LASTGAME.   For example, if you happen to die and forgot to save your game, you can always choose LASTGAME in the Restore Game dialog.   The demo pilot will save his continuing game as DEMOGAME.   Therefore, when choosing a name for your game to save as, do not use LASTGAME or DEMOGAME, since these will be overwritten.

Aborting Games

While playing Inner Space, you can abort the current game and get back to the intro.   This allows you to quickly get out of the current game and restore or start another.   To abort the current game, hit the ESC key while playing.   A dialog will give you the option of saving the current game before leaving it.   Switching between games in this way is efficient not only because Inner Space does not need to be closed and restarted, but also because most of the game graphics are already loaded.

Race Courses

Overview
The Inner Space race tracks pose a completely different challenge from normal game play for players and ship designers.   Since the goal is to complete a race course as fast as possible, racing provides an interesting diversion from going after icons and fighting with other ships.   The Inner Space race tracks also let you practice flying a ship in Inner Space is a relatively safe test area before going into real directories.

Racing as a Player
Getting good at racing is useful in the game since some of the directories you will encounter in Inner Space contain race courses.   In directories with race tracks, several ships compete in a mutli-lap race where the winning ship gets all the icons in that directory.   It is illegal to take the icosn if you don't win the race. Since racing involves more finesse, speed, and precise handling than normal game play, you may want to practice your skills on test tracks before racing against other ships for the icons.

On higher waves, hazards make the race tracks more difficult.   Another side to racing is combat.   Since weapons are still enabled in race courses, ships can attack hazards or each other while racing.   As a racer, you have to find the best compromise between speed, finesse, and combat in each race.

Test Tracks
In order to practice racing on the various courses that appear in Inner Space, you can go to special test track directories.   The test track directory names all end in '- RACE'.   When a race track is selected on the the Navigation window, you can select the number of competitors, difficulty level of the course, length of the race, and the speed of the competitors, relative to your ship.   For convenience, your ship is automatically refuelled at the beginning and end of any race.   Normally, the race continues until all ships have finished the course.   If you hit 'ESC' while in a race track, the current race will be aborted, allowing you to leave the wave.

Keeping Track of Other Racers
The Ship Watch window is particularly useful while racing because it shows how far any other ship is ahead or behind you in the race.   Every time any ship passes a flag, the amount of time that separates that ship and yours is updated. As long as both ships keep flying around the course, the time separating them will be accurate.   If either ship stops moving, the time will be somewhat inaccurate.

Zen and The Art of Inner Space Racing
While navigating the race tracks is relatively easy, mastering the art of racing requires dexterity, timing, guts, and an affinity with the track you are on.   You need to keep a close watch on your fuel level, since this is critical to winning races longer than one lap.   Fuel is often difficult to get without slowing down and wasting time.   You must also consider your competitors when racing.   If you can keep another ship from passing you or refueling, you can gain a major advantage.   True mastery of racing requires the judicious use of turbo-thrust.   When timed correctly, turbo-thrust can allow you to defeat even ships that are faster than yours.   You must be careful with turbo-thrust, since it consumes a lot of fuel.   The only way to develop your racing skill is to race on all tracks until you know exactly how to take each curve and how to get fuel without losing much time.   Overall, the most important thing to a good race is smoothness.   When you know the track well, you can anticipate each curve as you approach it.   If you can can cut a smooth line around the course, keep your speed up, and not hit too many walls, you will improve your times considerably.

Race Records

The best times for each ship on each race course are stored in the Inner Space GAMES sub directory by default. To easily compare times with users on other machines, you can change where the race records are stored to a common network drive.   To change where race records are stored:

1) Open INSPACE.INI with Notepad (or any text editor)

2) On the line that reads "RacePath=(path)", replace (path) with the directory path where you want race records to be stored. For example, if you wanted to store race records on network drive E:, change the RacePath line to read 'RacePath=E:\'.

Duelling

Overview

The Inner Space duel directories are places you can go to practice fighting other ships or to settle a dispute with another ship in the game.   Unlike ordinary directories, duel directories have no icons and no ship can leave a duel until all opponoent(s) are defeated.   Since different rules apply in duel directories from the rest of the game, no ships will come in to help a ship in trouble and no Enforcers will come in,, no matter what crimes might occur.   All duel directories end with '- DUEL'.

Ship Factory

Overview

One of the benefits of having the full registered version of Inner Space is the Ship Factory.   If you have the playable demo, the Ship Factory won't be included.   You can use the Ship Factory to see all the ships in the game, view the handling and behaviour characteristics for each ship and create customized ships of your own design.   Customized ships will only work with the full registered version of Inner Space purchased from SDi.   The basic Ship Factory that comes with the game allows you to create custom ships, but it is still a bit complex, so we offer an enhanced Ship Factory in the Inner Space Ship Builder's Kit to help you make great-looking custom ships quickly. The Ship Builder's Kit is an add-on product that can be purchased at the same time as the full game or at a later time.

In the Ship Factory, you can see each ship fly around a figure-eight course to get an idea how it handles and looks in motion.   The speed and handling of the ship going around the flags in the Factory is representative of the handling you can expect in the game.   The Handling and Behaviour windows show technical specifications for each ship and the attitudes that control it's behaviour.
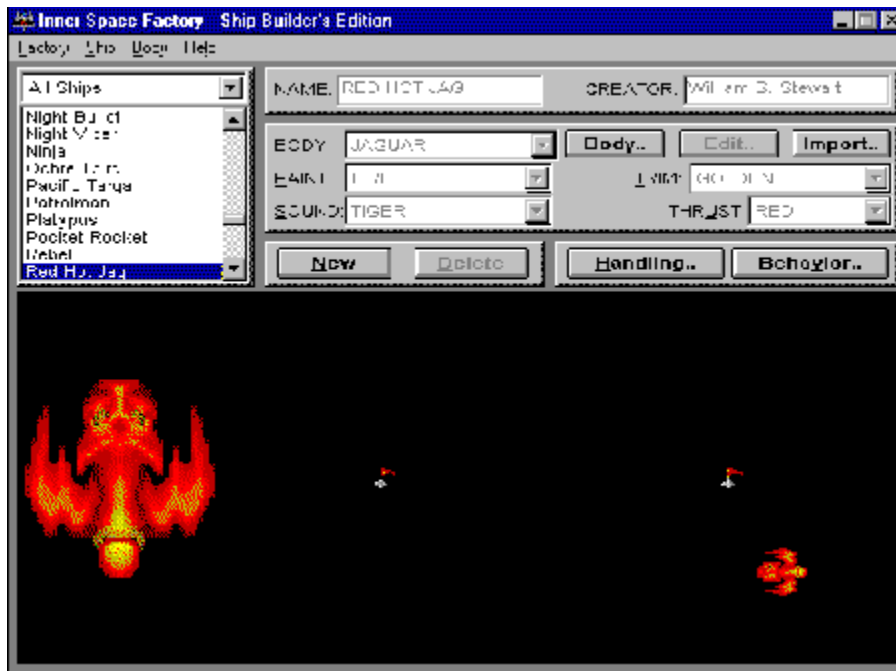
Use 256 Color Mode

Inner Space and the Ship Factory work and look best in 256 color mode.   Low-res (16 color) or Hi-res (True color 16 or 32 bit) aren't as good, especially in the Ship Factory.   When recoloring ships, you will see smooth morphing of color in 256 color mode, but a sudden reload in other graphics modes. 16 color VGA mode is particularly rough looking since ships must be dithered for display in this mode, even though only 16 colors exist in the ship source bitmaps. In some diplay modes on some computers, the ships in the Factory may appear invisible with only the thrust appearing.   This only happens in 16-bit, 24-bit or 32-bit color modes and is remedied by switching to 256 color mode for Windows graphics. You may also consider checking with the video card company and downloading an updated video driver if one is available.   Many new PCs do not include the very latest video drivers.

How Inner Space Optimizes Graphics for 256 Colors

The reason ships look best in 256 colors has to do with the way they are loaded and rendered. In 256 color mode, the game and Factory can lay down a custom 256 color palette optimized for Inner Space ships.   When 16 color ship images are loaded, the game and Factory smooth and shape the ship images to take maximal advantage of the large palette.   Therefore, when you look at the source image for ships, they will almost always look smoother and better in the game or Factory than viewed on their own.   For example, with only 5 shades of gray to suggest chrome trim on a ship, it is hard to make it look very smooth or realistic. When that ship is loaded and rendered for Inner Space, the ship image is rendered using 30 shades of gray, producing a result far superior to the source bitmap.   In this way, you could say that the source bitmap is a simplified color blueprint, but the actual ship image is what you see after it

is rendered.

The same rendering process allows the game to rescale ships from 1x to 2x or 1/2x scales without introducing jagged edges or sharp changes that you would get from simply zooming in on the original source bitmap.   However, only in 256 colors can Inner Space lay in it's custom palette. In other video modes, it must render the ships to fit the colors available which are not ideal for the game.

Customizing Ships

When you create a new ship for the game, you can then play the game using that ship and it may also appear as a computer-controlled player in the course of normal game play.

The colors, handling, behaviour, and sound effects can all be customized for ships.   You can even draw your own ship design for the ultimate in personalization.   The easiest way to make a custom ship is to make a variation on an existing ship in the game.   The ships that come with the game cannot be altered
themselves, but it is easy to make a copy of any ship and then alter it's characteristics.

If you hit the 'New' button, a copy of the ship you are looking at will be made for you to edit.   The new ship will have a slightly different name than the original to differentiate it.   You can rename the ship, choose a different body or paint job for it, and set all the other options. Use the Handling and Behaviour dialogs to make the ship exactly what you want..

Repainting Body, Trim, Thrust

The Paint, Trim, and Thrust options allow you to recolor the current ship.   Many different colors are available for Body and Trim, and Thrust can be either red or blue. The thrust color also controls the color of the ship's shots.   If you recolor a ship in 256 color mode, you will see the ship smoothly morph to the new colors. If not in 256 colors, the ship will simply be redrawn with the new colors.

Sound Effects

You can change the sound effects associated with your ship.   The sound list lets you pick one of the Inner Space sounds to be played when the ship is hit.   If you press Alt-S, a rock is thrown at the ship to create the proper context for the sound to be played.   You can also add your own sounds to the list of sounds.   Put any valid .WAV sounds that you want to use in the game into the SOUNDS sub directory (where you will find SOUND_FX.DLL and VOICE_FX.DLL) and they will appear in the Factory's sound list.

Handling

The Handling window allows you to change technical aspects of a ship, such as the strength of it's thruster, it's armor level, and the size of the fuel tank.   With more armor or a stronger thruster,   the ship is more massive and uses fuel faster.   If a ship has a cloaking system, it can use the cloak to hide from other ships, but the cloak also uses fuel.   As handling characteristics are changed, you can see an immediate change in the handling of the ship going around the figure-eight course and a text overview of the ship on the right side of the Handling dialog.

Many users think that if they 'max out' all the handling features, they will have the best possible ship design.   The reality is more complex due to the effects of any one handling change.   For example, the more massive the ship, the tougher it will be.   However, more massive ships are harder to maneuver, consume fuel faster, and generally have lower top speeds.   Speed, toughness, maneuverability and fuel consumption cannot all be truly maximized at the same time.   The trick is to optimize the ship characteristics for your style of play.   If racing or general manueuverabilty are most important to you, than a light, streamlined design will work well.   However, if you prefer brute strength and staying power, a massive design with large engines and fuel tanks will serve best.   As your style of play changes over time, the characteristics you want in a ship may also change.

Behaviour

The Behaviour window allows you to set the team that a ship will belong to, it's initial weapon, and it's attitude to friends and enemies.   The combination of these factors determine how a ship will react to others in the game.   For example, any ship on the Pirates team will act like a pirate (stealing and looting), but Attitude settings are equally important.   A ship which is Loyal to Friends will stick it's neck on the line to defend its allies, while a ship which is psychopathic to enemies will relentlessly pursue adversaries, even if it is close to dying.   What actually happens in the game also depends on circumstances and the history of interactions between the various ships.

The weapons are all rated according to their cost if bought in the ambulance.   The value of a weapon depends on how skillfully you use it.   Some weapons are extremely powerful if used at the right time, but useless otherwise. Other weapons have defensive functions that increase their usefulness beyond just destroying things.

Editing Ship Bitmaps

Creating customized ships is an interesting way to personalize your game experience and apply your creativity in a fun way.   When you make a new ship for Inner Space, you can fly your custom ship in the game and the new ship can also appear as a computer-controlled ally or enemy.   The utlimate in personalization is to draw your own ship design.

Any bitmap editor which can edit BMP files can edit ship images such as the Windows Paint or Paintbrush applications that come bundled with Windows 3.1 and Windows 95.   Ship bitmaps are BMP format bitmaps saved with a DIB extension simply to differentiate ship bitmaps from most other bitmaps you might have.

NOTE: The Enhanced Factory that comes with the Ship Builder's Kit makes it a little easier to edit your ship bitmaps. Although you must still use an external bitmap editor program to create or modify ship bitmaps, the Enhanced Factory does include an Edit.. button to open the current ship's image in a specified bitmap editor. By default, the Paintbrush bitmap editor will be used, but you can override this by changing the BitmapEditor setting in the INSPACE.INI file. Include the full path to your preferred bitmap editor.

Using the Ship Builder's Kit
If you have the Inner Space Ship Builder's Kit, you have the original source bitmap files for all the ships in the game. The images are all in 16 color bitmap format as is required for any bitmap to be used by Inner Space.   If you are going to make your own ship designs, it is very helpful to look at the original ship bitmaps to get ideas. You can also use the provided ship images as a basis to start your own ship bitmap, rather than starting from scratch.

2 Palette Choices - Many Colors or Many Shades
Although all ships use 16 color DIB files (BMP format), the image can have either the standard 16 color palette or a custom 16 color palette for color.   With the standard 16 color palette, there are 2 shades each of 8 colors, giving lots of color choices but very few shades.   For example, if you want to make a ship various shades of red, you are very limited artistically when you only have 2 reds to work with.

With a custom palette, you can have 10 colors for the body, 5 for the trim and one reserved for black.   Therefore, a red ship with chrome trim could be best drawn with a palette of 10 red shades, 5 gray shades, and one black for the background. With all those shades, it's possible to make a much better looking ship than with only 2 shades of each color.   When the terms *body* and *trim* are used to refer to colors for a ship, we really just mean that the largest part of a ship is called the body and smaller parts are called trim, similar to a car that might have navy blue body with chrome trim.   However, you can use any color to draw anywhere on the ship, so you have total artistic freedom.

Drawing Specifications
Custom ships must be in the standard Windows bitmap format know as 16 color DIB (Device Independent Bitmap) or BMP format.   Even though DIB and BMP are the same format, bitmap files must have the .DIB extension to be added the Inner Space Ship Factory.

One of the many advantages to using the enhanced Ship Builder's Kit version of the Ship Factory is that it will help you correctly import images for use in the game.   It is important to follow the instructions here regarding file formats and image size, but the Factory will catch anything that might be wrong and inform you clearly about what must be changed for it to work.

Ship bitmaps must be 16 color BMP format files saved with a .DIB extension.   The image should show the ship facing straight up on a black background.   Ships can be 25 to 45 pixels in size (measured as width) and the ship bitmap must be square.   Therfore, if your ship was 35 pixels high but only 23 pixels wide, you would need to round it up to be 35x35 pixels.

Although it is not required, you will get slightly better results if you make your ship bitmap width an odd number as opposed to an even number.   The reason it is better to have an odd width is to provide symmetry in the way the ship gets rendered.   For example, with a width of 43, you will have 21 pixels on the left, 21 pixels on the right and 1 pixel running down the center of the ship.   If the same ship were only 42 pixels wide, there would be 21 pixels on the left, 21 pixels on the right and no center pixel column.   The center pixel column makes the 43-width ship look slightly better than a 42-width ship, but it will work OK either way.

Multi-Framed Ships
The only time a non-square bitmap is usable is if you are creating a multiframed ship.   A multiframed ship can be use the extra frames for flapping wings, swishing tails, or to create a transforming ship shield.   Each frame of a

mutliframed ship must be square and each frame must be side by side in the bitmap.   For example, the duck ship bitmap in the game is a 3 framed ship.   Each frame is 35x35 pixels square, so the total bitmap is 105x35 pixels. Frame 1 shows the duck with open wings, Frame 2 shows the duck with partially closed wings, and Frame 3 shows the duck with fully closed wings.   When the Duck appears in the game, the 3 frames are played in a loop creating the effect of the ship flapping to propel itself through space. A similar technique was used to make the Dolphin, Killer Whale and Shark ships.   The Transformer ship is an example of using multiple frames to create a transforming shield mode for a ship.   Most ships only have a single frame, but you do have the flexibility to make more interesting designs. The maximum number of frames allowed for a ship is 4.

NOTE: *Not only does a custom palette allow you to create ships with smooth color shades, it also allows you to later recolor the ship any way you like.   You might draw the ship with red body and chrome trim but later decide you'd like it better in green and gold. Once it's in the ship list of the Factory, you can quickly experiment with recoloring any way you wish.*

For Best Results, Don't Start From Scratch
All the original ship bitmaps therefore use a custom palette.   When you make variations on these bitmaps, you can use the custom palette of shades to create smooth effects on your ship.   However, when creating a ship from scratch, you don't get a custom palette.   If you start from scratch with the Paint and/or Paintbrush programs that come with Windows, you're stuck with the 2 shades per color standard Windows palette and you cannot customize the palette.

If you want to make ships with a smooth palette, use the original source bitmaps provided with the Ship Builder's Kit. It's best to open one of the original ship images we provide and modify it to look the way you want.   If what you want to make is completely different from any existing ship, that's OK.   Just open one of the provided ships, then clear it all to black and start drawing with the custom palette that is still there. You can resize the image if the ship you started with was smaller or bigger than the ship you wish to make.

You might think that since you can't edit the palette and you will be stuck with the color of the original image you started with. Fortunately, this is not the case. The bitmap you create is stuck with the colors from the original image, but ships you create with that image are not.   Once you add the image to the Factory list of ship bodies, you can then recolor the body and trim any way you wish.   Therefore, it doesn't really matter what color the image is actually drawn in, just what colors you set later in the Factory.

Adding your New Ship to the Game
When you have edited an image and wish to add it to the Inner Space ship list, first put your new bitmap file in the Inner Space SHIPS subdirectory (C:\SPACE\SHIPS by default). Make sure that you change the name of the DIB file to something unique before adding it to the ship list. Then run the Ship Factory and hit the Import.. button.   All DIB files in the SHIPS subdirectory will then be displayed. Select your DIB file and choose the basic options you want for your new ship.

If there is any problem with the ship bitmap, the Factory will   tell you immediately what the problem is and suggest how to correct it.   If the Factory accepts the ship image, it will create a new ship entry in the Factory ship list.

More Options Once Your New Ship is in the Factory
A ship's basic characteristics are set by the bitmap image and the choices you select when adding it to the ship list. The image obviously determines the look of the ship, but also determines the mass and basic handling characteristics, too.

However, it is possible to then alter the colors, handling, behaviour, and sound effects for your new ship.   You can also recolor the body and trim for a ship if the ship was created with a custom palette.

Multiple Ships from One Body
Once you create a ship and add it to the Factory ship list, you can then create multiple copies that each use the same body but each have unique names, coloring, handling, weapons, and behaviour.

Balancing Appearance and Performance
The physical dimensions of what you draw are as important as the characteristics you later set for that ship.   For example, a light, streamlined ship such as the Mig 29 or the Dolphin will be faster and more maneuverable than a design similar to the Rocker or Terminator ships.   Even if you prefer combat to racing, the choice of design is problematical.   Some will prefer speed and weaponry for combat while others will prefer endurance and strength for fights.   Creating a ship design that is optimized for what you want (racing, fighting, general play) and your unique

style of play is one challenge in ship design.

The other challenge to ship design beyond how good it is for play is making a ship that is esthetically pleasing.   It will be much more satisfying to make a ship that looks exactly the way you want and has some special meaning for you. There is a lot of room for creativity in the look of ships once the overall shape has been decided for performance reasons.   You could make a ship look like something from a favourite science fiction movie, an interesting animal, a real or mythical warplane, or anything else that sparks your imagination.   Inner Space is an eclectic and interesting world where anything goes when it comes to ship ideas.

Technical Considerations

The shape of what you draw determine many of the ship's base characteristics. It is hard to make a single design that is good at everything.   If your ship has wings that can be ripped off by damage, the wings will protect the main fuselage from damage.   For design purposes, the game treats wings as thin lightweight planes and the fuselage as a conic section. If you imagine a fighter jet in 3D, this is the model applied to general ship designs.   If you have wing-like structures on your ship but do not designate them as wings per se, the entire ship will be treated as a conic section, resulting in heavier, less manueverable, but more sturdy design.

The better the ship you fly in the game, the better the opponents that will be put against you. Therefore, when making a custom ship, remember that the game will try to match the quality of you ship design with opponnents who are comparable.   If you make a sleek, fast racing ship, equally fast racers wil be put against you in the game. Also, the faster a ship's handling is, the faster the pilot must think to stay in control.   In the game, this means that computer pilots for faster ships actually think more quickly about flying and the game in general, posing a greater challenge to the user than slower ships.   With a combination of streamlined design, big engine, and low mass, it is actually possible to make a ship that is too fast to be flown by either a human or the computer without frequently smashing into hazards.   Remember to design for your needs and capabilities and that more is not always better.

Sharing Custom Ships With Others

Two of the features only available in the Ship Builder's Kit edition of the Factory are importing and exporting. Exporting allows you to store your unique ship creation with your name as designer and all ship characteristics intact as you set them.   When you export a ship, it can be given or emailed to other users to add to their copies of the game.   Similarly, importing ships allows you add ships to the game with all ship characteristics intact exactly as the ship designer specified them.

Exporting Your Ships

Once you have create a custom ship, it is fun to share your creation with other users. Exporting custom ships is easy. While your custom ship is the currently displayed ship, select the Export.. menu option from the Ships menu.   You will then see a message from the Factory indicating that your custom ship has been exported.   Since the .DIB bitmap file is the image for your custom ship, another file is written to store your creator name and all the custom settings for your ship.   The new file created ends in .SDI and will have the same name as the .DIB file for your ship.   For example, let's say you created a custom ship with a bitmap file ASHIP.DIB. The name of the ship itself could be anything you specify, so let's say you call it "A Super Ship" in the ship list.   If you select the Export.. menu option, the file ASHIP.SDI will be created to store all the ship settings for that ship.   Therefore, ASHIP.DIB and ASHIP.SDI are the image and settings for "A Super Ship" and you should send both files together to any other users who might want to import that ship to use in their copy of the game.   Below is a typical mesage when exporting has worked:
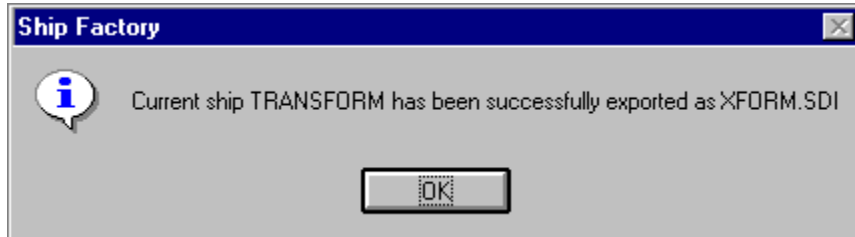
Note: *When exporting a ship, the .SDI file is written to the Inner Space Ships subdirectory alongside the .DIB file for that custom ship.*

You should also create a text file to describe your ship and anything about yourself you wish to share with other users.   A standard text form has been included with the Ship Builder's Kit to be used as a README file for custom ships.   The sample README text file is called MYSHIP.TXT. Open it in Notepad or any text editor and fill in all appropriate information about yourself and your custom ship.   To continue our previous example, we would open MYSHIP.TXT, fill out all the blanks in the form and then save it as ASHIP.TXT, to go along with ASHIP.DIB and ASHIP.SDI.   It"s essential that the .DIB, .SDI, and .TXT files for one ship all have the same first part of the file name so that it's clear they are all referring to the same ship.   Don't call the text file README.TXT since users will likely have many files of that name and it will be very confusing.

When sending a ship to others or uploading to a web site or online service, it's inconvenient to send 3 individual files, so you should ZIP together the .SDI, .DIB. and .TXT files for one ship into a single ZIP format file.   Aside from sharing ships directly with other users, you can also submit them directly to us and we can post them on our website for all Inner Space users.   When submitting a ship to us, email it to inspace@sdispace.com and please include a small note in your email indicating that you wish the enclosed custom ship to be posted for all Inner Space users to try out.   Our one-stop center for custom user ships is at **http://www.sdispace.com/gallery.htm**   Feel free to come to the SDi website and download ships that others have created as well as to submit your own!

Importing Ships from Others

Importing ships is about as easy as exporting ships.   First, you need to get the ship files to import.
http://www.sdispace.com/gallery.htm is the place on our website where you will find many user-created ships you can download. You can also get ships from friends who have Inner Space and have created custom ships themselves.   In any case, when you download or otherwise get a copy of a custom ship, there should be 3 files, a .DIB file, a .SDI file and a .TXT file, all starting with the same basic filename (such as MYSHIP.DIB, MYSHIP.SDI, MYSHIP.TXT).

Note: *Many custom ships will be in a single .ZIP file simply to make it more convenient for transferring over the internet, but when you unzip the ship file, there will be 3 files that come from the zip file.*

Open the .TXT file for the custom ship to read about the ship creator and their comments about the custom ship they created. Put the .DIB and .SDI files in your Inner Space Ship subdirectory and then run the Factory. In the Factory, either click on the Import.. button or select the Import.. menu option from the Ships menu.   You should now see a list of .DIB files for custom ships in your Inner Space Ships subdirectory that can be imported into the game. If no files are visible in the Import dialog, then perhaps you put the files in the wrong location or they are somehow named incorrectly.   When you select a .DIB file from the list, it will be loaded and characteristics for that ship will be displayed on the right as displayed in the example below. Once a ship is selected, just hit OK to import the new ship.
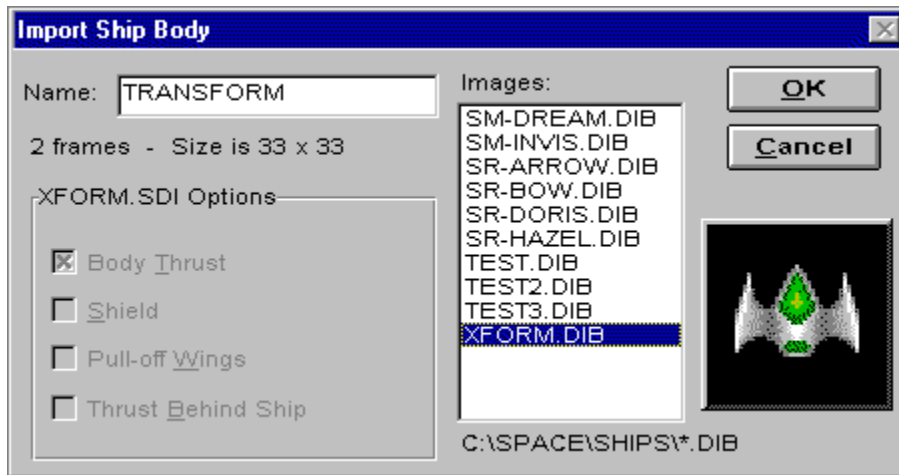
Note: *It's also possible to import ships where the .DIB file exists but there is no corresponding .SDI file. The import process is exactly the same to import just the .DIB file, but without the .SDI file, you don't get the original settings and name for the ship as set by the ship designer.   If importing just the .DIB file, it is up to you to set a good name and choose good settings for handling, color, sound and behaviour for the imported ship.*

Game Settings

Setting Dialog
There are a number of audio, speed and detail options that you can change on the Game Settings dialog.

Sound Effects
The volume level for the game can be set if you have a sound card that supports volume control.   The sound system list shows the options that are possible.   If you have a volume-capable stereo sound card, all options will be available. If you do not have a sound card installed, Inner Space will not try to play any sound or music.   Inner Space will not use a PC Speaker sound driver because such drivers slow the game to an unacceptable level and have unsatisfactory audio quality for the sounds in the game.

NO SOUND - No sound effects.
STANDARD SOUND - All sound effects are played at the same volume, no volume control.
DYNAMIC SOUND - Sound effects are louder when they come from objects closer to the user's ship and the sounds change volume as the associated object gets closer or farther away.
3D DYNAMIC SOUND - Sound effects track with the objects that emanate them and also come from the position to the left or right of the user to correspond with the object's position.

The effect of 3D Dynamic sound is that you can hear missiles, fireballs, and other sounds approach or go away from your ship as they move.   When you hear a distant explosion or missile launch, you can use the direction of the sound to determine where it came from.

Sound and Music Control
You can toggle on or off the sound effects, voice effects, and the background music for the game on the Audio dialog. You can also set the relative volume levels of music versus sound effects.   When setting the relative volume, sound effects refers to both voice and non-voice sound effects.

Mixing Channels
You can select from 1-8 mixing channels for the sound effects to be played.   The more sound channels you select, the denser the sound world of Inner Space.   For example, with 8 sound channels, you can hear up to 8 different sounds playing simultaneously, but with only one channel, only one sound can be heard at any time.   Sound mixing does impact on game speed, so you should use less channels if you are concerned about performance.   Sound mixing is available for STANDARD, DYNAMIC, or 3D DYNAMIC SOUND.

Difficulty
The overall game difficulty can be set to Gentle, Easier, Normal, Harder, or Extreme!.   On Gentle difficulty, the game is somewhat less violent and has less objects that you can bump into.   You will encounter more challenges on the higher difficulty levels, and the game is very difficult on Extreme! difficulty level. Regardless of difficulty setting, the first 3-5 waves of a new game are relatively easy to get you into the play. The Difficulty setting is most noticeable above Wave 7.

Auto Braking
If Auto Braking is turned on, your ship will brake whenever you stop thrusting.   This makes it easier to control when you start, but you might want to turn it off when you get used to flying around. Without auto-braking, when you stop thrusting, your ship will drift in whatever direction you were travelling, although drag will tend to slow you down gradually.

Detail Settings
Display Options
Joystick Options

Skipping Sequences
The Skip Sequences option on the Display Options dialog allows you to have Inner Space automatically skip some sequences.   If set to 'Skip Some', the intro after the company credits and the pre-wave description of object are skipped.   If set to 'Skip All', 3D landing scenes in the Ambulance and Hall of Justice are also skipped.

Alternatively, you can control sequence skipping yourself.   Hitting 'ESC' during the intro or pre-wave descriptions

jumps that section and hitting 'SPACE' will jump a minor section. For example, pressing 'ESC' jumps the entire pre-wave description, but 'SPACE' jumps from the description of icons to ships.   Holding down the 'Ctrl' key while entering the Ambulance or Hall of Justice will make it skip the landing sequence.

Play Speed

The Play Speed scrollbar allows you to change how fast the game plays.   Inner Space is calibrated for 36 frames/second. If you run Inner Space faster or slower than 36 frames/second, time speeds up or slows down in the game (see Wave Time Clock).   You can slow it down to 4 frames/second or speed it up   to maximum speed. Maximum is as fast as your computer can go full out.   On a moderately fast computer, you can do a background task like downloading a file while playing the game at normal speed (36 frames/second).

To see how fast the game is playing, press 'B' and the Targeting Display will show the game speed.   You can change the game speed while playing by pressing Alt+ or Alt -.

Scaling

Inner Space can be scaled to 1/2x, 1x, or 2x graphics with dynamic rendered images for each scale level.   1/2x scaling allows much more of the world to be seen at once, but the graphics are less detailed.   2x scaling has large graphics with enhanced detail, but less of the game world can be seen at one time.   The Game Setting dialog allows you to change the game scaling, but the game can also be rescaled while playing by pressing Ctrl+ or Ctrl -.   You will probably find that seeing more of the world at once makes 1/2x mode easier to play in, but the higher quality graphics of 1x and 2x are the tradeoff.

Special Times of Day

Screen Savers

General

Included with Inner Space are interface modules that allow you to use Inner Space as a screen saver display.   When run as a screen saver, Inner Space will show a continuing live demo when your computer is unattended.   If 'Allow Game Play' is checked, Inner Space allows you to play the game when it comes up, but will run a demo if you do not play.   When 'Allow Game Play' is not checked, Inner Space goes directly to a demo and 'wakes up' on any user input. If Inner Space is busy loading graphics or has the Navigation window showing, it may take a few seconds for it to 'wake up' on user input.   When game play is allowed, you must exit Inner Space normally (Alt-X or using the menu).

Interfaces to both the Windows and After Dark screen savers have been included.   The Windows screen saver is accessible from the Windows Control Panel.   Select Control Panel from Program Manager or run CONTROL.EXE from File Manager.   In Control Panel, open the Desktop settings to access the screen saver.   Push 'Setup..' to configure Inner Space screen saver settings.   On the Setup dialog, push 'Config' for more settings.

If you are using After Dark as a screen saver, select 'Inner Space' from the module list to make Inner Space the current display.   Click on 'Config' to fully configure Inner Space's screen saver settings.

Demo Options

The Configure dialog allows you to set Inner Space to show a continuing demo, a race, or a battle. If set for 'Random Demo', Inner Space will randomly choose a demo, race, or combat to show each time. You can also select the ship(s) to use in the demo.   If set for a continuing demo, Ship #1 will play the game and show what he is doing as he goes along.   Each time the continuing demo runs, the demo pilot will continue his previous game and eventually show advanced play and scenes that come in higher waves.   If you change Ship #1, a new demo game will be started.

The race option allows you to see the specified ship(s) compete against each other on the specified race track.   You can choose 1 Ship as a racing option to see how fast the specified ship can navigate a race track on its own.   Select 2-4 ships is more interesting because it shows not only how fast each ship is, but how they compete with each other using speed, finesse, and possibly combat. If Ship #2 is set to '.Random', the 2nd ship in a race will be chosen to be roughly comparable in performance to Ship #1.   Ship #3 and Ship #4 cannot be manually selected and will always be roughly comparable to Ship #1. See 'Racing As a Designer' for more detail on designing ships for Inner Space racing.

The battle option puts Ship #1 in a fight against Ship #2 in Dodge City (a duelling area).   Any 2 ships can be set to fight each other, even ships that would normally be friendly.

Optimizing for Your Computer

General
Although most graphics applications for Windows are slow, Inner Space has been designed to be fast on relatively slow computers.   Any 386 or better computer should be able to run Inner Space at calibrated speed (36 frames per second), although the game can do more and is more enjoyable the faster your machine is. If your computer is fast enough, you can play Inner Space while background tasks are running, with neither Inner Space nor the background tasks slowed down perceptibly.   Typical background tasks are sending and receiving faxes, downloading files on a modem, and compiling programs.

Testing Your Computer's Speed
Even if you have a fast computer, the speed that it runs Inner Space is subjective.   Use the following table to determine if you should take steps to improve the performance of Inner Space on your computer.   First, run INSPACE.EXE and close it after the intro has run for at least five seconds. In your Windows directory will be a text file called INSPACE.INI.   If you open it with Notepad, you will see a line that reads "Calibrate=xxxx", where xxxx is a number to use in the table below.

Calibrate value
> 1300	Your computer is very fast and you can easily use HIGHEST Detail.
800-1300	HIGHEST Detail is probably OK, but you might want to use HIGH Detail level.
520-800	Your computer is moderately fast, but you might want consider the optimizing options and use MEDIUM or HIGH Detail.
<520	Use LOW or MEDIUM Detail. Consider the other optimizing suggestions.

Optimizing
The following suggestions can improve how fluid the animation looks in Inner Space and how well it can multi-task with other programs.   If Inner Space seems fast enough on your computer, you can disregard the following suggestions.   Most users with a 486-class computer or better will have no speed problems, but if the game seems too slow, please try the following to improve performance.

Use LOW or MEDIUM Detail setting.   The higher the Detail setting, the more work the game does to animate everything.   If the game seems too slow, you should use the LOW or MEDIUM Detail setting.   The performance improvement by switching from HIGHEST to LOW Detail is big, although the game will look very similar.

Use 1x or 2x game scaling. Inner Space can be scaled for 1/2x, 1x, or 2x graphics.   On some computers, 1/2x scaling is slow compared to 1x and 2x graphics.

Play in a smaller resolution. The bigger your play area, the more objects the game must draw each frame. The game can play faster if you change to a smaller resolution or play in a window smaller than full-screen.

Do not use the Ship Watch windows or turn off Animated Ship Watches. The Ship Watch windows can slow the game down if not playing in 1x graphics mode.   Optionally, you can turn off 'Animated Ship Watches' (on the Display dialog) so that Ship Watches take less processing time.

Upgrade your video card or driver.   A slow video card makes Windows crawl and a fast one makes it fly.   For optimal speed, we suggest 256 color graphics mode.

Get more memory.   Windows itself and Windows applications use a lot of memory.   If you don't have enough physical memory, but use disk space as virtual memory, Windows will page to the hard disk and slow down all applications, including Inner Space.   If you run low on memory and do not use virtual memory, Inner Space or other applications could have an error and crash.   To be safe, we suggest that you allocate at least 2Mb of virtual memory.

Troubleshooting

Common Problems

The following are answers to common technical questions.   Please read these and look in the rest of this manual before inquiring about tech support. **If you have access to the internet, visit our website at http://www.sdispace.com/tech.htm for the quickest and most comprehensive technical support.**

Q: Why does the game sometimes seem to slow down?

A: Inner Space is probably yielding time to another application running on your computer.   If you are printing, faxing, or running some other background task, Inner Space will slow down, if necessary, to allow other tasks to execute quickly.   See the Optimizing section of this manual if the game seems too slow generally.

Q: Why does the game seem slow, although my computer is very fast?

A: On most computers, the game is very fast, but the game can be slowed down by an inefficient 24 bit/pixel video driver or a sound driver that is not completely compatible with Windows or the wavemixer.   Try setting the sound mixchannels to 1 (in Game Setiup Alt-G) to disable the wavemixer.   If the game seems too slow, you can also try reinstalling, since that sometimes straightens the problem out.

Q: I was playing for a while and my ship died without saving my game.   Can I get back into that game?

A: Inner Space saves your game at the end of each wave in a game called LASTGAME.   Select LASTGAME on the Restore Game dialog to get back into that game.

Q: After installing Inner Space with sound effects and music, why don't I hear any audio from the game?

A: Inner Space requires that you have a Windows-compatible sound card (with accompanying Windows sound driver) to play its audio. To hear the music, your MIDI mapper must be configured correctly for your sound card (in the Windows Control Panel). The game will not use PC speaker sound drivers. If you have an older sound card, it might not report itself correctly to Windows.   Therefore, to force Inner Space to play audio, add "AllowSound=1" to your [Inner Space] section of INSPACE.INI (in your Windows directory).

Q: Why do the audio effects sound garbled or hissy?

A: The Windows wavemixer may not be compatible with your sound card.   Therefore, try setting the mix channels to 1 channel in the Game Settings dialog.   When set to 1 channel, Inner Space plays audio without using the wavemixer.

Q: When I install Inner Space on another computer, why does it ask me to pay for it again?

A: Your license agreement allows you to install Inner Space on one computer only.   To install on another computer or hard drive, you must first deinstall Inner Space from its current installation. See 'Installing Inner Space' for further install information.   If Inner Space is installed on more than one computer, you must either pay for the additional copy or stop playing it.

Q: The game crashes from time to time. What is going on and what can I do about   it?

A: If the game ever crashes, it is almost certainly fixed by updating to the latest version of the game from our website and/or by changing to 256 color mode for your Windows display.   99% of all problems are fixed by these 2 things. To get the most recent version of the game, simply go to our website at **http://www.sdispace.com/sites.htm** and download the free upgrade.   We update the game any time we discover a bug that needs to be fixed.   We fix all known bugs, so the latest version has no known bugs of any kind. If there's still any sort of   problem, visit our tech support database at **http://www.sdispace.com/tech.htm**

If the game halts with an error, it may be that Windows is low on memory.   Please check that Windows is set up to use at least 2Mb of virtual memory.   To see or change Virtual Memory settings, open the "386 Enhanced" item from the Windows Control Panel (CONTROL.EXE).   If you have ruled out a problem with insufficient memory and sound or video card problems, please report the problem and specifically what the game was doing when it crashed.

Although Inner Space has been extensively tested on many different computers, there are potential problems with some video drivers, particularly new high performance video drivers that use shortcuts to make them faster.   If you experience a crash while loading graphics, try using one of the standard video drivers (VGA or SVGA) that ship with Windows to see if the video driver is the problem.   It will help us if we know if the problem is specific to your video driver. Use Windows Setup (SETUP.EXE) to change the currently active video driver (Display). Please inform us of any such incompatibility and we will do our best to fix it promptly.

Q: Why is there a delay before some of the sounds play?

A: The sound effects for the game may be compressed or it could be a problem with the wavemixer.   Set mixchannels to 1 to turn off wavemixing.   Both compressed and uncompressed versions of the sound effects are available for use with the game.   Compressed audio takes half the disk space of uncompressed audio, but takes longer to load. To avoid such delays, check the Keep Sounds in Memory checkbox on the Audio Dialog or use the uncompressed version of the sound files.   Both compressed and uncomrpessed version of the sound files are available in our support forum on CompuServe (GAMDPUB).

Tech Support

Tech Support

If you can't find the answer to a technical problem with Inner Space in this manual, you can direct questions to Inner Space Tech Support. **If you have access to the internet, visit our website at http://www.sdispace.com/tech.htm for the quickest and most comprehensive technical support.** *Our tech support website answers questions about playing the game, building ships, installing, deinstalling, ordering, add-on products, what to do if the game crashes, and much more.* Visit our website first before considering any other options because:

1) our Tech Support website has answers to every technical question we have ever been asked
2) the Tech Support website is available to you 24 hours a day, every day of the year
3) You will get the fastest, most up to-date information from our website without paying for a voice or fax call.

If you don't have internet access, you can also send us tech questions by fax or email.   Naturally, you won't get an answer as quickly as directly accessing our website, but we will do our best to help. Allow longer for response if asking a question near a holiday or weekend. Always provide detailed information about the problem as detailed below and if you have internet access, read our tech support section thoroughly.

(Sending Tech Questions)
       INTERNET: inspace@sdispace.com (web site **http://www.sdispace.com**)
       Compuserve: 71621, 1163
       fax: 403-240-0105

If reporting a bug, please provide enough information about your game and computer so that we can reproduce the problem.   We need to reproduce the problem to be able to fix it.   We provide unlimited tech support via email to registered users and we will do our best to fix any reported bug.   Do not call the order line for tech support.   Bugs reported via email received highest priority and are easiest for us to track, fix, and get back to you on. Keep in mind that we test rigorously and we fix all bugs known before any given release goes out.
see Credits for more info about SDI.

Avengers

This team likes to gain resources and will fight if the odds favour them or if vengeance is called for. Otherwise, they avoid conflict and keep to themselves.   ex. Sky Talon, Transformer, Biplane.

Predators

Fighting is a way of life for this team.   They are interested in resources, but the call of battle is hard for them to resist.   Their determination makes them good allies and tough opponents.   ex. Jaguar, Tiger, Shark

Fuzzy Ones

The members of this team are non-violent by nature, but will attack if provoked.   They are more of a nuisance than a threat, but you do not want them as enemies.   They are good at annoying others by stealing what they are going after and are hard to kill.   ex. Rubber Duck, Teddy Bear

Pirates

These free-spirited outlaws do their own thing and make a point of opposing the law.   They would rather loot others than make gains on their own and enjoy fighting.   However, if the odds turn against them, pirates are quick to retreat.   ex. Rogue, Grim Reaper, Scoundrel, Lackey

Enforcers

This team patrols Inner Space, looking for anyone breaking the law. See "Laws of Inner Space" for more detail.   Offenders may be warned, attacked, and/or destroyed, depending on their crime(s).   This team is the best armed, so tangle with them at your own risk!   ex. Patrolman, Interceptor, Terminator

Knights

This is a proud and tightly-knit team of honorable characters.   They are great allies because they are always ready to help a friend.   They only kill opponents when there is no other choice.   ex. Samurai, Excalibur, Dolphin, ZenMaster

Speed Demons

This team has a need for speed! They are apathetic to the troubles of others, but support each other. They are hard to attack due to their superior flying performance.   ex. Screaming Rod, Viper, Thunderbird

Renegades

These vandals have no regard for others and enjoy destroying things.   They kill icons and randomly attack objects for the fun of it.   Renegades usually won't help others or even their teammates.   Avoid conflict with these ruthless loners!   ex. Outlaw Falcon, Midnight Dragon

Credits

Inner Space Development Team

Director	*Bill Stewart*
Programming	*Bill Stewart & SDi Staff*
Music Composed by	*Doug 'The Thin Man' Blackley*
Voice Effects	*Nancy Stewart & James Stewart*

Dedication

For Chaela, the love of my life, whose arrival in this world coincided with the release of Inner Space to the world at large.

Copyright

Laws of Inner Space

Laws of Inner Space

Inner Space is patrolled by a team of Enforcers who make sure everyone follows the laws.   You can do whatever you want in Inner Space, but if you keep breaking the law, the Enforcers will eventually come after you.   If an Enforcer catches you breaking the law, you can be warned, arrested, or destroyed, depending on the circumstances.   An Enforcer has to see the crime being committed, so many crimes go unpunished.   If they don't see the crime, they can't take action.

Some teams are very lawful and some go out of their way to break laws.   For example, the Knights are relatively law-abiding and the Pirates take delight in flouting the law.   If arrested, you will be handcuffed and forcibly escorted out of wave to the Hall of Justice.   Enforcers will respond with force if you resist arrest. Below is a list of Inner Space crimes:

Stealing Doughnuts from an Enforcer
Destroying Doughnut Launchers
Attacking a Fleeing Ship
Taking a Dead Ship's Resource Pack
Destroying Good (Non-virused) Icons
Unsportsmanlike Conduct
Resisting Arrest
Attacking An Enforcer
Reckless Thrusting

Types of Enforcers

There are three classes of Enforcers that you can encounter.   Patrol Class Enforcers (Patrolman, Constable) are small and most often to be seen in the game.   Patrol officers come in to the game from time to time, looking for criminal activity.   If they see crimes being committed, they warn the offender and call in an Intercept Class (Interceptor, Lethal Weapon) Enforcer if an arrest should be made.   Intercept officers are tough, well armed, and fast. They will try to handcuff the offender and take him out the gate to the Hall of Justice.   If a criminal resists arrest, a Terminator Class (Terminator, Eliminator) Enforcer may be called in to destroy them.   Terminators have a large array of weapons and heavy armor, but are slow to maneuver.

Hall of Justice

If you are caught breaking the laws of Inner Space, the Enforcers will arrest you and bring you to the Hall of Justice. If you resist arrest, the Enforcers will rough you up before bringing you in.   A description of the crimes you are charged with and the event that lead to your arrest is read to you, followed by the punishment to be handed out.   The punishment will depend on your prior arrests, the severity of your current crimes, and how many resources and weapons you have.   You can try to run away from an officer trying to arrest you, but sooner or later another Enforcer will come after you because of the pending arrest warrant.

Inner Demon

General

The Inner Demon is a dark reflection of you that lurks in a black hole in Inner Space.   The demon opens a portal and sucks you into his world from time to time.   Like a dream, fighting the demon takes place outside of Inner Space, and no permanent damage will be done to your ship from such battles.   However, by successfully facing the demon and the dragons that guard his lair, you can attain special weapons for use in Inner Space.   There are 4 noble weapons that the demon will use against you.   You can acquire these weapons if you figure out what to do.   By using all the Noble Weapons, it is possible to finish the game without going through every directory.

If you acquire a noble weapon or the demon destroys you, your ship will return to Inner Space as it was when you entered the black hole.   While in the black hole, you can hit 'ESC' to return to Inner Space. The key is to keep moving and feed energy to the dragons.   Each dragon is curled around an energy ball that flickers with sparks to show its energy level.   The dragons increase in energy as they are fed.   A miniature version of the Inner Demon challenge can be played in the Inner Space ambulance.   The ambulance Inner Demon is a simplified game that allows you to practice for battle with the real demon and figure out how to survive against him.

Noble Weapons

The Noble Weapons allow you to master Inner Space and finish the game without completing all directories.   These weapons are only attainable through struggle with the Inner Demon.   The Noble Weapons let you affect other ships and space itself using the power of the mind.

The Noble Weapons are Enlightenment, Uncertainty, the Attractive Force, and the Repulsive Force.   Unlike ordinary weapons, Noble Weapons cannot be bought or sold in the ambulance.   The Attractive and Repulsive Forces are two sides of the Inner Force that controls all objects in Inner Space.   Unifying the forces into the Inner Force allows you to use the Attractive and Repulsive Forces simultaneously. The "Unify Forces" ambulance option will be available if you acquire both forces.   You need all Noble Weapons to defeat your greatest enemy in the "Demon's Gate" directory and conquer Inner Space.   Without the Noble weapons, you need to capture or destroy all icons on the drive before you can finish the game in the "Demon's Gate" directory.

Detail Settings

Inner Space has a number of speed and detail settings that allow you to trade off game speed for more or less detail. The game's speed control system will do its best to keep the game playing the same speed, regardless of the detail settings.   A lower detail setting allows a slower computer to play faster and smoother.   The game looks almost identical at LOW and HIGHEST detail levels, but the effect on performance is significant.   When the game is installed, the computer's speed is tested and a reasonable detail level is chosen, although you can change this setting later.

The QuickLoad option allows the game to load ship graphics faster.   Ships are loaded 4 times faster when quickloaded, but will not look as detailed.   QuickLoad can be set to ALWAYS, MID-WAVE, or NEVER.   If QuickLoad is set to MID-WAVE, only ships that are loaded in the middle of a wave will use quickloading for a faster load.   An example of a mid-wave loaded ship would be an Enforcer who enters the wave to apprehend a criminal.   The Enhanced Graphics option affects the quality of the most time-consuming graphics rendering. If Enhanced Graphics is checked, the game takes more time doing precision rendering as it loads, but produces better graphics.

Display Options

The Display Options dialog allows you to control the overall appearance of Inner Space.   Enhanced Brightness makes stars and some effects brighter.   This option is useful if playing Inner Space on a laptop computer with an LCD screen.   The Menu option allows you to have a menu at the top of the Inner Space window.   The Game Border option turns on a 3D border for the game.   Turning the menu or game border off gives you more play area.   The Animated Ship Watches option allows any targeting or watch display of other ships to show the motion and velocity of the ship, as opposed to a static image.   If Inner Space seems to run too slow, try turning Animated Ship Watches off.

Special Times of Day

The world of Inner Space depends not only on what you do, but also when you are playing. At certain times of day, fuel tanks are replaced with other items that might be appropriate. The special times are Breakfast, Coffee, Lunch, and Tea Time. For example, at Breakfast time (8-8:30 AM), fuel tanks are replaced with juice and croissants. You can customize these special times to coincide with your life. In INSPACE.INI (in the Windows directory), enter the special time followed by the time you want it to occur. For example, to set Lunch time to 1PM, type "Lunch=1300" under the [Inner Space] section of INSPACE.INI.

Ordering Instructions

The fastest and easiest way to order is through our website at **HTTP://WWW.SDISPACE.COM**. Our website is available for online ordering of all our products 24 hours a day. To order by phone, call   403-240-0103 with your Mastercard or VISA credit card handy.   To order the game through CompuServe, GO SWREG and order #5202. Otherwise, fill out the form below to mail, fax, or email us your order.   If you provide your unique serial number (from the Inner Space registration dialog), we will send you a registration code that will fully enable your demo copy while you wait for the full version to arrive.   If you phone in your order, you will receive the registration code right away!

Why Order Inner Space?

ORDERED BY
Name:
Company:
Street Address:
City:
State/Prov:
Zip/Postal Code:
Country:
Email ID:
Serial Number:

PRICE LIST

PRODUCT	PRICE
Operation: Inner Space	$24.95 each (USD)
Executive black T-shirt	$12.95 each (USD)
Executive black sweatshirt	$16.95 each (USD)
Inner Space coffee mug	$9.95 each (USD)
Truly Amazing Mousepad	$8.95 each (USD)

SPECIAL OFFER! The Inner Space T-shirt Pack includes the full Inner Space package, plus a T-shirt and mousepad, all for only $29.95+($6 shipping and handling).

ITEM DESCRIPTION	QTY	PRICE EACH	TOTAL

|_____ SUBTOTAL
|_____ Shipping & Handling
|_____ Canadians add 7% GST
|_____ TOTAL PAYABLE

PAYMENT
Check ___   Money Order (US funds) ___   MasterCard ___   VISA ___

Name as shown on credit card: _____

Card #: _ _ _ _   _ _ _ _   _ _ _ _   _ _ _ _   Expiry: ____/_____

SHIPPING COST
The shipping & handling cost is $4 USD for the first item to anywhere in the world.   Add $2 US for each additional item,

SENDING YOUR ORDER IN
Fill in the order form and send it to us by mail, fax, or email as listed below.

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84 Coach Gate Way SW
Calgary, AB
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Fax: (403) 240-0105
INTERNET: inspace@sdispace.com
Compuserve: 71621, 1163

Why Order Inner Space?

EXPERIENCE THE REAL INNER SPACE
The demo is just the demo, but all features are enabled in the full version of the game.   If you order, you get more than a hundred ships to choose from to be in the game, you can save and restore games, and more than 20 wild weapons are available. You can also create your own ships in the Ship Factory and struggle with your Inner Demon for the noble weapons as well as powerup your ship in numerous ways.

GET THE FULL PACKAGE
Registered users receive the full Inner Space package including full color manual, reference cards, and a complementary CompuServe Startup Kit offer (value $29.95). We also have cheat codes and additional online information through our website at **WWW.SDISPACE.COM** to make the full version much more fun.

UPGRADES, DISCOUNTS, NEW STUFF!
Registered users also receive our newsletter with upgrade notices, discounts on new versions, and information on our latest products.

OUR APPRECIATION
Inner Space took a lot of work to make and we'll really appreciate your order.   Please support our efforts to make Inner Space the best Windows game ever!