D E S C E N T ™
II

INSTRUCTION MANUAL
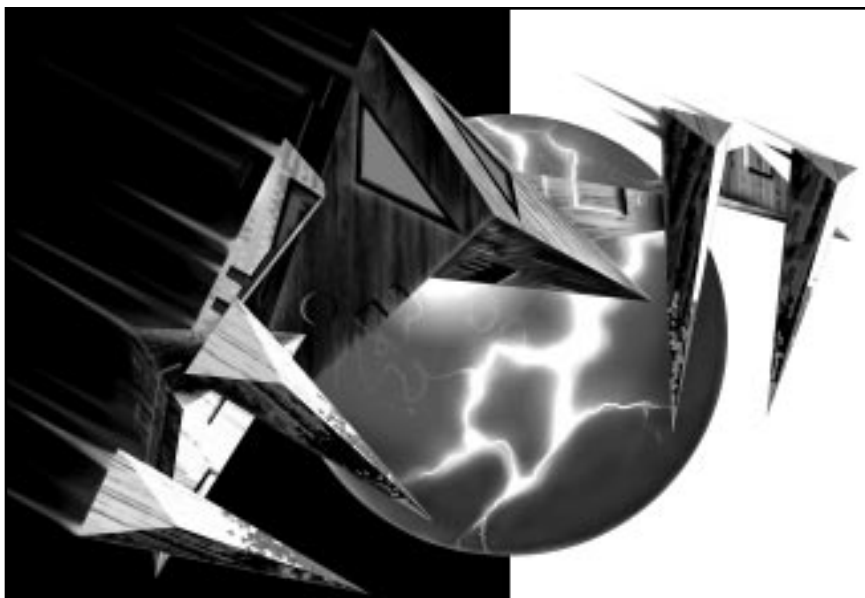
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SYSTEM REQUIREMENTS

REQUIRED: IBM™/Tandy™ or 100% compatible 486-DX50 or faster with 8 Megabytes of RAM (16mb if running under Windows 95™), hard drive and DOS 5.0 or later.

STRONGLY RECOMMENDED: Pentium™ processor, 16MB RAM, stereo 16-bit sound card with General MIDI support, a quality joystick and lots of spare time.

SUPPORTS: Microsoft™ Mouse or compatibles. Sound Cards: Sound Blaster (Pro, 16, AWE32) and compatibles, Media Vision Pro-Audio Spectrum (Plus, 16, and Studio), Gravis Ultrasound/Max, Roland SCC-1 (MIDI Music Only). 1 or 2 Joysticks supported as well as ThrustMaster WCS/FCS/FLCS/TQS, Gravis Game Pad/Phoenix, Logitech Cyberman/Wingman Extreme, CH Flightstick Pro/Throttle, Microsoft SideWinder Pro. VR support: Forte VFX-1, CyberMaxx, Virtual I/O i-glasses and 3D Max.

INSTALLING DESCENT™ II

For best results, do not run under Microsoft Windows 3.x. If you wish to run under Microsoft Windows 3.x, please refer to the README.TXT file in your Descent II directory for instructions.

If you have less than 16MB of memory on your system, it is strongly recommended that you install and run the DOS version of Descent II.

From DOS:

- Insert the CD into your CD-ROM drive.

- At the C:\> prompt, type the letter of the drive you are installing from followed by a colon. Hit <ENTER>. Then just type INSTALL.

Example:

C:\ >D: <ENTER>
D:\ > install<ENTER>

- Continue below, after the Windows 95 directions.

From Windows 95:

Insert your Descent II CD into your CD-ROM drive, and click on the Install gadget on the Autorun dialog box that pops up. Or, click on the Install icon on the CD.

Both DOS and Windows, Continued:

- The Descent II Installer will first play a test movie to determine the abilities of your system. When the test is completed, it will suggest either High or Low resolution movies.

    WARNING: If you choose High resolution movies when the Installer has recommended Low, you will probably experience sound and video problems during playback.

- After the movie test, the Installer will give you the choice of several install options, and the disk space required based on your movie resolution. These options are:

    ○ SMALL - Copies only a bare minimum to your hard drive. There will be longer delays starting Descent II and between levels using this install.

    ○ MEDIUM - Copies all game-related data to the hard drive, leaving the cinematics on the CD. This is the recommended level of installation.

    ○ LARGE - Copies all game-related data and level cinematics to the hard drive. The intro and endgame movies remain on the CD.

○ CRAZY - The mega-install! All game files and cine-matics are installed to your hard drive. Note: the Descent II CD will still be required at game start-up.

NOTE: If the installer recommends Low-resolution movies, you may try switching to High resolution and using Large or Crazy install. This will install the movie files to your hard drive, which may improve the movie playback to an acceptable level.

• Once you have chosen an install size, you will be offered a choice of hard drives to install to and the space free on each.

• The default subdirectory for the installed files is \GAMES\DESCENT2 on the chosen drive. You can change the sub–directory name by entering a new name in place of this.

• DOS ONLY: When the game is finished installing, you'll see the Descent II Setup screen. This screen lets you customize the sound and music setup in Descent II. If you're not sure about these options, you may choose Auto-Detect Sound Hardware. Descent II then detects your hardware setup and chooses the options it thinks are best.

Use the Test Digital and Test Music options to make sure your sound card is set up correctly.

WARNING: if you are running Descent II from DOS and there is a hardware conflict, Auto-Detect may lock up your computer. If this happens, reset your computer and set up your sound card manually.

From Windows 95:

If you're running Descent II from Windows 95, double-click on the Descent II icon, or click on the "Run Descent II" gadget on the Autorun menu that appears when you first insert your Descent II CD.

If you have less than 16MB of memory on your system, it is recommended that you use the DOS version of Descent II.

From DOS:

Change to the directory in which you installed Descent II. If you chose the default option when you installed, you can do this by typing:

CD \GAMES\DESCENT2

Type D2 and press Enter.

Descent II will start and play the introductory movie. The movie gives background information and narrative concerning events following the conclusion of Descent 1: First Strike.

> ***NOTE:** **If the intro movie appears "jerky" or the sound skips, consult the Troubleshooting section near the back of this manual for help.***

If this is the first time you've started Descent II, you'll be asked to enter your pilot name. This name is used to save your settings and to identify yourself during multiplayer games.

You will then be asked to choose an input device. Use the up and down arrow keys on your keyboard to move the highlight and then press <Enter> to select the highlighted option.

You will now be at Descent II's Main Menu.

To jump right into the game, press <ENTER> to select New Game and choose a skill level (Rookie is recommended for first–time players). After a short movie you will be given a briefing from PTMC and find yourself in Level 1.

Movies and Music

Descent II offers full-motion cinematic cutscenes with driving digital soundtracks. They can be displayed in 640x480 VESA, or 320x200 (see install notes at the start of the manual). Based on the install tests, it should suggest which resolution is best for your system. If you experience playback problems during these movies, consult the Troubleshooting section near the back of this manual.

Descent II also has redbook music tracks, featuring original tracks from Ogre (of Skinny Puppy), Type O Negative, and other artists. The redbook songs are essentially regular audio CD tracks stored on your Descent II disc, and can be played with any CD player.

If you have difficulties getting the redbook tracks to play during Descent II, contact Interplay Technical Support (714-553-6678).

Menus

Use the arrow keys to move around menus in Descent II. Unless otherwise noted, hitting <ESC> will accept the current menu's settings and return to the previous one. Some menus contain checkboxes and radio-type switches that can be toggled by hitting <SPACEBAR>. Slider-type items are changed used the left and right arrow.

When in the game, you can hit the <F1> key to bring up a list of keyboard commands. Hitting <F2> from the game will bring up the Game Options menu. Certain menus have special control keys; see the descriptions of those menus for more information.

THE MAIN MENU

The Main menu offers the following choices:

NEW GAME
Start a new game of Descent II. You may begin on any level you have reached in previous games.

LOAD GAME
Resume a previously saved game. Saved games are stored in your pilot file, so be sure the proper pilot is selected.

MULTIPLAYER
Allows you to start a game of Multiplayer Descent II using a modem, serial cable, or IPX network. See the Multiplayer Games section below.

THE MAIN MENU

OPTIONS   Takes you to the Options Menu (see below).

CHANGE PILOTS   Allows you to change the current pilot or create a new one. All control configurations and saved games are stored in your pilot file.

VIEW DEMO   Lets you play a recorded demo file.

HIGH SCORES   See Descent II High Scores.

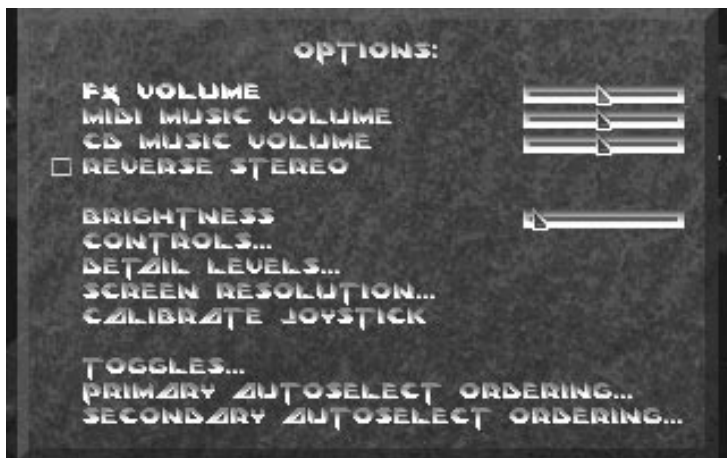**CREDITS**   See the list of people who created Descent II.

QUIT   This will return you to DOS/Win95.

OPTIONS MENU

FX VOLUME   Changes the volume of sound effects.

MIDI MUSIC VOLUME Changes volume of music played using MIDI sequences.

OPTIONS MENU

CD MUSIC VOLUME
Changes CD volume of music played directly off the Descent II CD.

REVERSE STEREO
Allows you to reverse the stereo sound channels. This is sometimes necessary for earphones, speakers, or extension cables that are wired incorrectly.

BRIGHTNESS
Some monitors are darker than others. If you have trouble seeing details on your game screen, try adjusting this slider. This will not affect the movie playback.

CONTROLS
Takes you to the Controls Menu (see below).

DETAIL LEVELS
Allows you to adjust the Detail Levels of Descent II (see below)

SCREEN RESOLUTIONS
Allows you to change the screen resolution used. For resolutions above 320x400, we strongly recommend a Pentium (or better) system.

CALIBRATE JOYSTICK
If your joystick drifts, you probably need to calibrate it. Also available in the game by hitting <SHIFT> <F7>.

TOGGLES
This menu contains several toggle options for Descent II.

PRIMARY/SECONDARY AUTOSELECT ORDERING
These menus allow you to choose the "preferences" of your weapon Autoselection. When you pick up a weapon in the game, it will be selected if it appears higher on the list than the weapon you are currently using. Weapons appearing below the "Never Autoselect" line will not be autoselected, and must be manually selected. To move the position of an item in the list, use the arrows to select that item, then hold down the SHIFT key and use the arrows to move the item. Release SHIFT when the item is in the desired position.
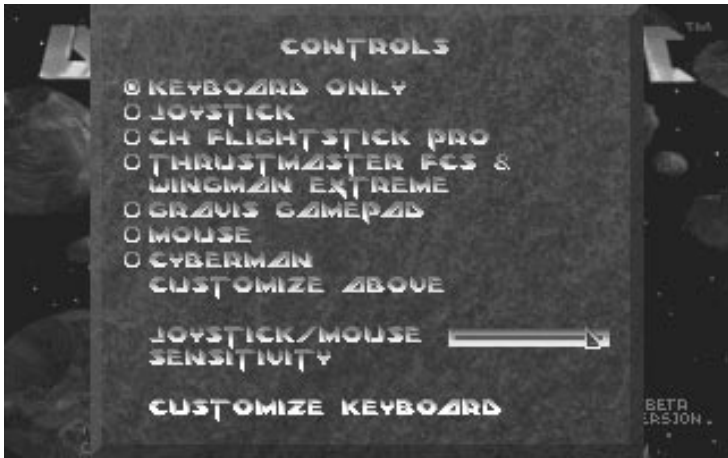
Use this menu to select and configure your input device. Supported devices are keyboard, mouse, and joystick. Various enhanced joysticks have their own items. All changes are saved to your player file for future use.

Select the device you plan to use by pressing <SPACE>. After choosing your device, you can select the Customize Above option to change the function of the various buttons and other controls on that device. Note that your keyboard will always be available. To reassign key functionality, choose the Customize Keyboard option.

If you have a Thrustmaster WCS, Gravis Phoenix, or other programmable device, see the README.TXT for more information.

To change an entry in the Customize Above or Customize Keyboard menus, select the function you want to change, and press ENTER. Then press the key or button you want to assign to that function. For axis entries, press ENTER, then move the new joystick axis.

DETAIL LEVEL MENU

DETAIL LEVEL MENU

Select one of the five detail level settings. Lower settings will give faster screen updates in the game; higher settings will give better graphics quality.

You may also chose the Custom Settings option. There are six different settings you can adjust in the Custom Details menu:

OBJECT COMPLEXITY: This affects the number of poly-gons used by objects like robots, player ships, and other 3D objects. Lower values will increase speed but simplify the shape of many objects.

OBJECT DETAIL: This determines at what distance an object changes from flatshaded to texture-mapped details. Setting this slider to a lower value will cause robots to be flat-shaded much closer.

WALL DETAIL: This option determines at what distance walls appear flat-shaded vs. texture-mapped. It also affects the accuracy vs. speed of the texture mapper. A low setting here can cause walls to become jittery and /or warped-look-ing.

WALL RENDER DEPTH: This will change the maximum distance you can see. Lower values will increase the speed of Descent, but will cause flat-colored "walls" to appear in long hallways. These boundaries do not affect weapons or their objects, only your visuals.

AMOUNT OF DEBRIS: Changing this slider will determine how much debris is made when robots explode. Setting this to a low value will make fewer pieces in heavy combat.

SOUND CHANNELS: In addition to visuals, sound can have a minor effect on the speed of your game as well. This slider will change the maximum number of sounds that can be played at once.

These checkbox items control various game settings.

SHIP AUTOLEVELING: If this is on, your PyroGX ship will attempt to align itself with the curvature of the mine tunnels. This is useful for first-time Descent II players, but may be turned off once you're accustomed to full 3D flight.

SHOW RETICLE: Allows you to turn the targeting reticle display on or off.

MISSILE VIEW: When enabled, this will show a "missile cam" view in your secondary weapons display. When a missile is not in the air, the weapons display will work normally. This option is enabled by default, but can be disabled for a small increase in game speed.

HEADLIGHT ON WHEN PICKED UP: When this option is checked, your headlight will default to ON when the powerup is picked up. You may then turn it on or off manually.

SHOW GUIDED MISSILE IN MAIN DISPLAY: If enabled, this will show the guided missile view in the main display (showing your ship's view in the small window). If disabled, the guided missile view will show in a small window.
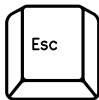
TOGGLES MENU

<u>ESCORT ROBOT HOT KEYS:</u> When this is turned on, you may command the Guide-Bot using the <SHIFT>-1 through <SHIFT>-0 hot keys instead of selecting a command from the Guide-Bot menu.
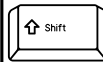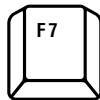
KEYS

This section describes keys that are active during game play. Many of the keys can be reconfigured in the Options/Controls/Customize Keyboard screen.

For information of key usage in menus, see above.

Esc	Abort game
F1	Help screen
F2	Options
F3	Toggle cockpit on/off
F4	Drop marker
F5	Record demo
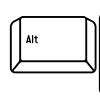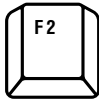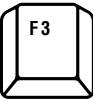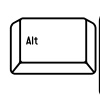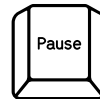
F7 + Shift	Calibrate joystick
Alt + F2	Save game
Alt + F3	Load saved game
Pause	Pauses the game in single-player games. In multiplayer games, this will display a game info screen.
+ -	Change window size
Print Screen	Save screen shot. (Saved in PCX format.)
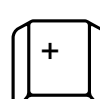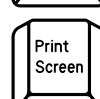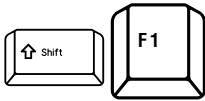
Shift	F1	Cycle left camera view window
Shift	F2	Cycle right camera view window
Shift	F2	Bring up Guide-Bot Command Menu
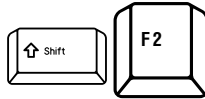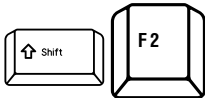
Shift [!1] *through* Shift [)0] Guide-Bot commands
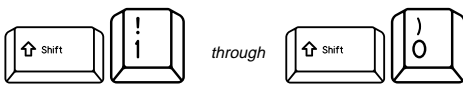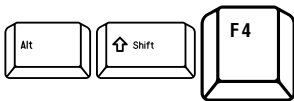
Alt Shift F4 Rename Guide-Bot

The following keys are active only during multiplayer games:

F6 Allow player to join restricted game

F7 Toggle between multiplayer HUD displays

F8 Send message

F9 *through* F12 Send Taunt macros

Shift F9 *through* Shift F12 Define F9-F12 taunt macros

KEYS
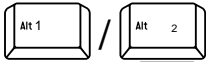
Alt 1 / Alt 2   Select team for new player
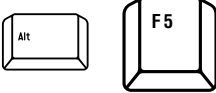
Alt / F5   Toggle display of player names on HUD
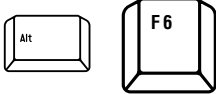
Alt / F6   Change player name display on HUD
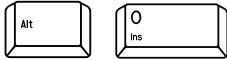
Alt / 0 Ins   Drop flag (Capture the Flag games only)

The following keys can be reassigned in the Options/Controls menu. The defaults are shown here:

Flying controls:

← →   OR   4 ←   6 →   Turn left, right

↑ ↓   OR   8 ↑   9 Pg Up   Rotate up, down
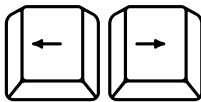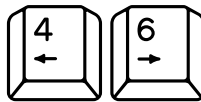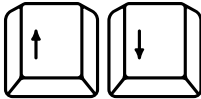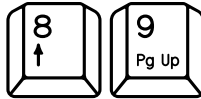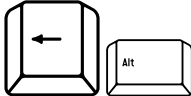
← Alt   Slide

! 1   # 3   Slide left/right

–   + =   Slide up/down

A   Forward
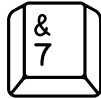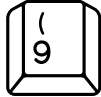
Key	Action
Z	Reverse
Q OR &7	Bank left
E OR (9	Bank right
S	Afterburner (with Power–up) slide

Weapons:
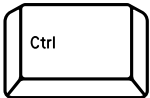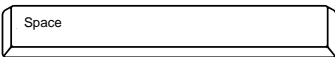
Key	Action
Ctrl	Fire primary
Space	Fire secondary
B	Drop proximity bomb/smart mine
F	Fire flare
Shift F5	Drop currently-selected primary weapon
Shift F6	Drop currently-selected secondary weapon
Del <,	Cycle primary/ secondary weapons
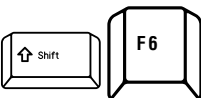
Weapon Selection:

Each selection key will switch between the two weapons assigned to that key. Descent II will remember which of the two weapons you last selected, and will return to that one when you return to that entry.

Key	*Weapon 1*	*Weapon 2*
1	Lasers/SuperLasers	(used as laser levels 5 & 6)
2	Vulcan Cannon	Gauss Cannon
3	Spreadfire Cannon	Helix Cannon
4	Plasma Cannon	Phoenix Cannon
5	Fusion Cannon	Omega Cannon
6	Concussion Missile	Flash Missile
7	Homing Missile	Guided Missile
8	Proximity Bomb	Smart Mine
9	Smart Missile	Mercury Missile
0	Mega Missile	EarthShaker Missile
[,]	Cycle primary weapon	
[.]	Cycle secondary weapon	

> **NOTE: The two cycle keys will select the next available weapon of that type. The order of the list can be changed under the new Options/Autoselect Ordering menus.**

Other Keys:

Select rear view

Transfer energy to
shield–only works
if Energy > 100

Toggle headlight
on/off, if player has
the Headlight power-up
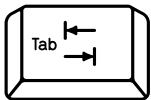
Automap

Automap controls:

- To rotate the Map, use the ship turning keys.

- To move the Map, use the ship sliding keys.

- To move in and out of the Map, use the forward/reverse keys.

- To show more or less of the Map, use + or - keys.

- To reset the default Map view, use the primary weapon firing key.

- 1-9 selects marker.

- [Ctrl-D] Deletes selected marker.

KEYS

The following keys are active when using certain VR devices. See below for information on using these devices.

Alt	F 5	Toggle VictorMaxx mode
Alt	F 6	Cycle VR resolution
Alt	F 7	Switch left/right eye displays
Alt	F 8	Cycle head tracking sensitivity
Alt	F 9	Cycle headset type
Alt	F 10	Toggle HUD

Following is a description of the features and gameplay options in Descent II.

When you play Descent II, you find yourself thrown into alien worlds populated by deranged robots, determined to destroy you. It is your mission to fight through the robot hordes to each mine's Main Reactor. Destroying this reactor and escaping is your primary mission!

In the following you'll find brief descriptions of the robots, weapons, powerups, obstacles, and other challenges you'll encounter on the way.

Robots

The mines in Descent II are populated with a dizzying array of robots, nearly all bent on destroying you. They will use a variety of weapons and defenses against you, and use them with varying amounts of intelligence. Some will charge you directly, others will hide or attempt rear attacks. Some robots will carry weapons you can use, and will drop these when you destroy them, as well as other powerups. Some will even steal your weapons from you!

The Guide-Bot

New to Descent II is the Guide-Bot. He's an automated scout robot that has been smuggled into the mines to help you. He's small, blue, and can be found on all of the regular levels - though not on the secret levels. He's usually imprisoned in a little cell near the entrance of each mine. You can choose to free him by blasting open the door to his cell and use his help, or leave him be (you will not be penalized).

Once the Guide-Bot has been released, you can bring up his command menu by hitting SHIFT-F4. The following Guide-Bot commands are available:

0.   Find next goal

1.   Find Energy Powerup

2.   Find Energy Center

3.   Find Shield Powerup

4.   Find any Powerup

5.   Find a Robot

6.   Find a Hostage

7.   Stay away from me

8.   Find my Powerups (Powerups you dropped after dying)

9.   Find the Exit

T.   Suppress messages

Option 0 will direct the Guide-Bot to the next task you must complete to finish the level. That may be finding a key, finding the reactor, or escaping the mine.

All of the numbered commands can also be issued during play by pressing the shifted number of the command. For example, <SHIFT>-1 for "Find Energy Powerup."

Choosing "Suppress messages" prevents the Guide-Bot's messages from appearing on your HUD. When messages are off, this menu item changes to "Enable Messages," which can be selected to turn messages back on. There are no shortcut keys for the Supress/Enable Messages commands.

Once you issue a command, the Guide-Bot will attempt to follow it until another is issued, or you have achieved the goal. If you issue no commands, the Guide-Bot will first find the keys needed to complete the level, then the reactor, then the exit.

The Guide-Bot will do his best to find his next goal, but he may not be able to if he needs to get through a locked or hidden door. Once you have opened the door, the Guide-Bot will continue on his default or assigned task.

While the Guide-Bot is small and fast, he will die if exposed to enough combat.

If you fall far behind the Guide-Bot, he will come back looking for you. He will not open secret or restricted access doors to attain a goal, but will do so in order to find you.

You may see a camera view from the Guide-Bot's point-of-view by using the <Shift>-<F1> and <Shift>-<F2> keys to select the left and right windows. Each time you press these keys, you select a different view. Press the key until you see the Guide-Bot's view.

You may give the Guide-Bot a name by pressing Alt-Shift-F4 in the game. You will be prompted to enter a name which will be used to identify the Guide-Bot's HUD messages.

Weapons

Your Pyro-GX is equiped with Primary and Secondary weapon systems. There are 10 weapons of each type. When you are first inserted into Level 1, you are equipped with Laser Cannons and Concussion Missiles. As you explore the mines, you will find more powerful weapons and powerups to use. See the Powerups section for a complete description of each weapon.

Most Primary weapons require energy to use. The Vulcan and Gauss Cannons use ammo that can be found throughout the mines. Secondary weapons are typically missiles found in packs of one or four.

If your currently selected Primary or Secondary weapon is depleted of energy or ammo, your next available weapon will be Autoselected. The priorities of this weapon selection can be changed in the Options/Autoselect Ordering menus.

Weapons are selected using the 1 through 0 keys. Pressing a selection key will select one of the two weapons assigned to that key. Pressing the key again will select the other weapon. Descent II will remember which of the two weapons you last selected, and will return to that one when you return to that entry.

Key	Weapon 1	Weapon2
1	Lasers/SuperLasers	(used as laser levels 5 & 6)
2	Vulcan Cannon	Gauss Cannon
3	Spreadfire Cannon	Helix Cannon
4	Plasma Cannon	Phoenix Cannon
5	Fusion Cannon	Omega Cannon

6	Concussion Missile	Flash Missile
7	Homing Missile	Guided Missile
8	Proximity Bomb	Smart Mine
9	Smart Missile	Mercury Missile
0	Mega Missile	EarthShaker Missile
[,]	Cycle primary weapon	
[.]	Cycle secondary weapon	

It is possible to drop either a primary or secondary weapon that is currently selected. This can be useful when in a cooperative or team multi-player game, so that your comrade can pick up a weapon he needs but doesn't have.   In single-player games, you can drop weapons in strategic locations such as the start of a level, so you'll know where to find them when you need them. It's a good idea to stash some weapons in case you die so you won't have to go virtually un-armed to retrieve your weapons.

Use Shift-F5 to drop your currently-selected primary weapon, or Shift-F6 to drop your currently-selected secondary weapon.

Powerups

Throughout the mines are objects you can pick up that give you new weapons, enhance your ship's capabilities, or replenish your energy or shields.

ACCESS KEYS: These keys give you access to the different security levels of the mines. They are color-coded to the doors they open.
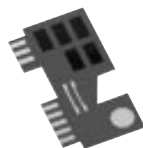
ENERGY BOOST: This will give your energy banks a boost, up to 200 units max. Energy Centers can deliver recharges up to 100 units.

SHIELD BOOST: This will give your ship's shields a kick. By getting shield powerups, you can get your shields up to a maximum of 200 units.

CLOAKING DEVICE: Cloaks your ship a limited time. When cloaked, it is hard for robots and other players to see you, and weapons that track (such as the Homing missile) will not be able to lock onto you. Cloaking wears off after 30 seconds.

INVULNERABILITY: Makes your ship invulnerable for 30 seconds.

EXTRA LIFE: Gives you a bonus life.

AFTERBURNER: This gives your ship turbo-boosted thrusters. Afterburners operate off of a separate energy reserve that charges itself from your normal energy banks. When the afterburner key is held down, your ship moves at twice its normal speed, until the key is released or the afterburner charge is exhausted. When the key is released, the afterburner energy will recharge. The default Afterburner key is <S>; it can be reassigned under the Controls menu.

HEADLIGHT: Helps illuminate nearby mine walls. Also makes your ship more visible to surrounding robots (and players!). The default key to turn your headlight on and off is 'H'. When you pick up the headlight, it will be on or off depending on the setting in the Options/Toggles menu. NOTE:

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When ON, your headlight will drain energy from your main energy reserve. The headlight will not operate if you have less than 10 units of energy.

ENERGY-TO-SHIELD CONVERTER:
Allows you to divert energy over 100 to your ship's shields. Hold down the Transfer key (default is <T>) to activate. Every shield unit costs 2 energy units to convert.

LASER:
Laser cannons have six total power levels. The laser powerup will give you the next available level up to level 4.

SUPERLASER:
These beauties will boost your laser above level 4, up to the maximum of 6. The first one you find will raise your laser to level 5. The second will put you up to 6.

QUAD LASER:
This powerup will modify your existing laser system to fire four bolts instead of the standard two.

VULCAN CANNON:
This weapon rapidly fires explosive-tipped shells.

GAUSS CANNON:
Similar to the Vulcan, this weapon fires fewer but more massive and devastating bursts of ammo. Uses the same ammo as the Vulcan cannon.

VULCAN AMMO:
This gives you ammunition for the Vulcan & Gauss Cannons.
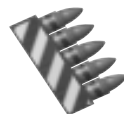
SPREADFIRE CANNON This fires a spread of energy at your target.

HELIX CANNON: The newest model of the Spreadfire line, this spews destruction over an even wider area.

PLASMA CANNON: Fires bursts of supercharged plasma.

FUSION CANNON: Fires destructive blasts of energy directly from the ship's fusion reactor. Capable of punching through large crowds of robots before running out of power.

PHOENIX CANNON: A turbo-charged version of the Plasma cannon, the energy bursts from the Phoenix will ricochet off walls.

OMEGA CANNON: Casts an ultimately powerful beam of energy at your target.

CONCUSSION MISSILES: All-purpose dumbfire rockets. Come singly or in packs of four.

HOMING MISSILES: Same size warhead as Concussion Missiles, these are equipped with a tracking device that can follow a target around most turns. Come singly or in packs of four.

GUIDED MISSILES: These missiles are guided by the pilot (using normal flying controls) until detonated or until the fire key is pressed again. At that point, they become normal homing missiles.

PROXIMITY BOMBS: These bombs are launched behind your ship, waiting to explode when something gets near. Can be armed as a secondary weapon, or dropped directly with Drop Bomb key (<B>by default).
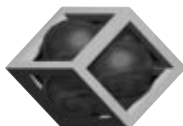
SMART MINES: More sophisticated versions of the Proximity bombs. When detonated, these spew forth globules of energy that track nearby targets. Can be armed as a secondary weapon, or dropped directly with Drop Bomb key (<B> by default). Cannot harm the player or robot who drops them.
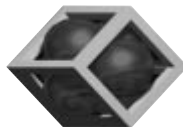
SMART MISSILE: When this missile detonates, it sends bomblets of heated plasma after the surrounding targets.

MEGA MISSILE: Keep out the range of this missile's massive blast.

MERCURY MISSILE: Fast missiles that quickly blast your target to pieces.

EARTHSHAKER MISSILE: The ultimate in mine-rocking destruction, the Earthshaker creates a huge explosion and sends deadly projectiles at nearby enemies. Treat with respect.
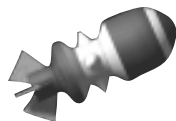
Doors

　　There are a variety of doors that can be found in the PTMC mines. Most can be opened by either bumping into them or shooting them. There are some, though, that can only be opened if you have the appropriate access key. Others can only be opened if certain actions are performed or the Reactor is set to self-destruct (e.g. the emergency exit). Hostage doors must be destroyed by repeat fire. Some doors are hidden. Certain other doors and secret doors can only be opened by destroying a control panel. These control panels are located throughout the tunnels along specific walls. When opened, some doors will remain open, while others will close again after a few seconds. Some doors will only open once.

Control Panels
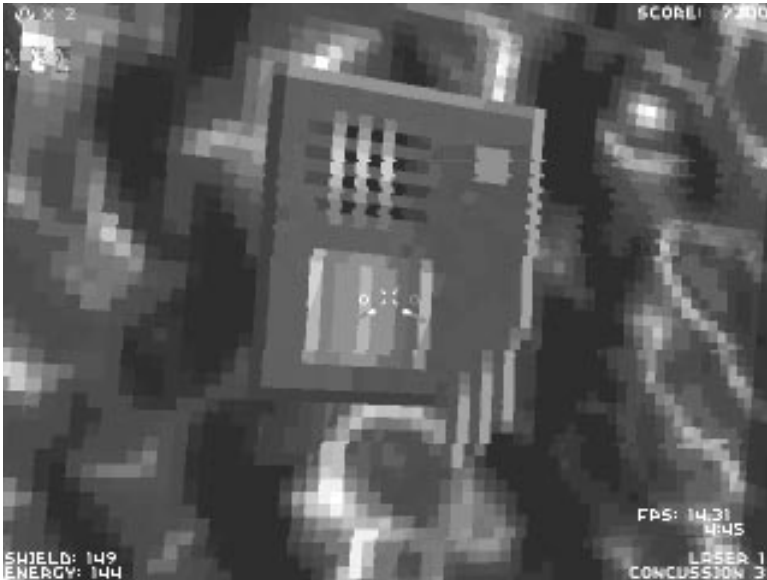
    Glowing control panels can be found throughout the mines in Descent II. These control panels can be destroyed to trigger various events. For example, some control panels may deactivate force fields, remove walls, open doors, or even release hostile robots. Successful completion of some of the mines may depend upon destroying the appropriate control panel.

Main Reactor

The Reactor is the power generator of the whole mine. It's usually located in a secluded place away from day-to-day mine mishaps. When the reactor is severely damaged, it will initiate a sequence ending in the destruction of the entire mine. At this point, the emergency exit door for the level will open, and you have a limited amount of time to find the exit and leave the mine.

Hostages

On some mines you will find blue-uniformed humans who have been imprisoned by the robots. By blasting through their prison doors, you can rescue them from certain death. Bonus points are awarded at the end of each level based on how many hostages you saved. Once you've picked up the

hostages, be sure to leave the mine alive. If your ship is destroyed, any hostages on board will die as well!

The Automap

The Automap keeps track of places you've been. As you move through new territory, your progress is drawn in by the Automap. To access the Automap, press the Tab key. To close the Automap, press Esc or Tab.

1) The center object is your ship. Other green objects are hostages.

2) The red area is the Reactor.

3 The red, yellow and blue walls are locked doors. These doors require the use of corresponding color-coded access keys for passage.

4) Green walls are unlocked doors.

5) Yellow areas are energy centers.

6) The purple segment is the mine's entrance. Robot Materialization centers are also drawn in Purple.
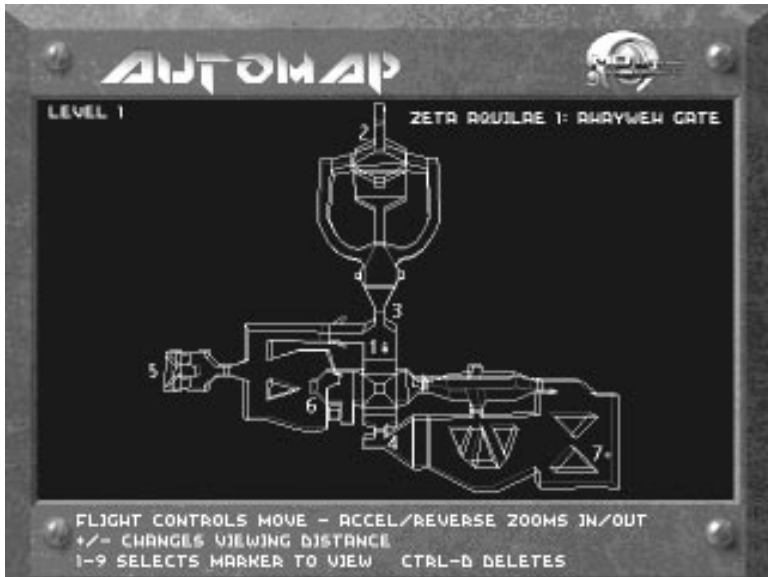
7) Glowing red circles are markers you have dropped. Use 1-9 keys to select markers.

   If you have acquired the Full Map power-up, you will see the entire map, including areas you have not yet explored. The unexplored areas appear in blue.

   See Controls section above for movement controls in the Automap screen.

Secret Levels

These levels, accessible only by teleporters hidden in the mines, are storehouses for weapons and ship accessories. Although they are usually not heavily defended, they are full of traps and are designed to prevent entrance into the largest caches of weapons. Multiplayer games cannot be played on secret levels.

Exit from a secret level is also via teleporter. You may exit at any time even if the level has not been destroyed. Unlike normal levels, secret levels may be visited repeatedly, even if you die there. However, once the reactor on a secret level has been destroyed, you cannot return.

Secret levels do not conform to the rules of normal levels. Be prepared for anything to happen. You can not save your game while on a secret level.

Energy Centers

At specific sites within every mine there are energy centers designed for "on the fly" replenishing of a robot's power cells that will boost your ship's energy level. Although these centers will only boost your energy level up to 100, it is possible to achieve a maximum level of 200 by collecting energy packets that are scattered throughout the mines. These energy centers have distinct gold walls with an energy field between them.

Force Fields

Force Fields are energy beams used to block access to parts of the mine. They will repell and damage your ship upon contact, and reflect energy weapons. They have been placed in the mine to guard the keys or powerups. Try to find an alternate path to your goal, or locate a control panel that will deactivate the force field.

Robot Generators
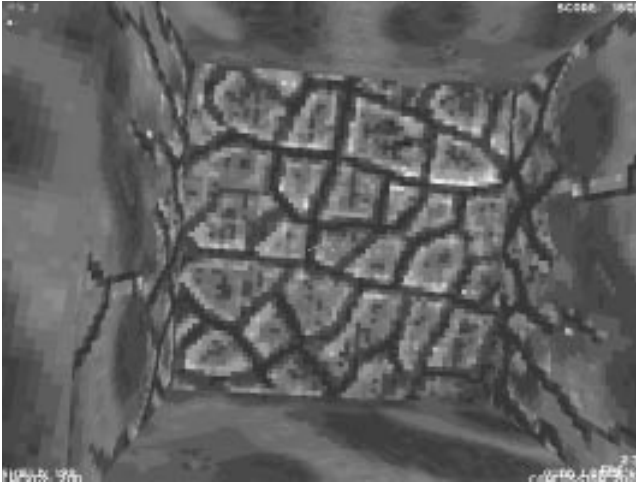
Automated centers that determine a mine's needs and assemble robots from surrounding minerals and metals. Very dangerous.

Markers

To aid you in your exploration and mapping of each mine in Descent II, it is possible to drop markers. Once you have chosen an appropriate location to drop a marker, press the F4 key. You will be prompted to enter a brief line of text to be associated with this marker. Hit <ENTER> when done with your message. Whenever you (or another player) flies over a marker, that marker's message will be displayed on your HUD. In single-player games, you may drop up to 9 markers. In multiplayer games, each player may drop up to two markers.

Markers will appear on the Automap screen as a red dot with the marker number inside. You can see the text for a marker by using 1-9 keys to select a marker. The text for that marker will be displayed on the screen. To delete the selected marker, press Ctrl-D.

In multiplayer games, you can use the <Shift>-<F1> and <Shift>-<F2> keys to select camera views from your markers. Marker cameras are not available in single-player games.

Score

Accumulating enough points will grant you extra lives. Points are awarded for destroying robots, escaping a mine with hostages, and finishing the game with lives to spare. An end-of-level Skill Bonus is awarded for playing on Hotshot skill level or above. Your score determines where you place (if at all) on the High Scores screen when your game is over.

Cockpit and HUD Displays

1) Aiming Reticle
   1A) Primary weapons arming status
   1B) Secondary weapons arming status

2) Primary weapons display. Also shows ammo for Vulcan and Gauss cannons, and Omega cannon charge (0-100%)

3) Secondary weapons display

4) Weapons energy status bar

5) Shield energy status indicator

6) Ship status indicator

7)   Enemy missile lock alarm

8)   Access key indicator

9)   Current score

10)   Ships remaining

11)   Afterburner energy indicator

12)   ProxBomb/SmartMine counter

Missile Views

Whenever you fire a missile in Descent II, a camera view from that missile will be displayed in the right window on your cockpit or status bar, or overlaying the main display in full-screen mode. You can disable missile views in the Options/Toggles menu.

Camera Windows

The two cockpit windows that normally show your Primary and Secondary weapons can be used to display additional camera views. Use <Shift>-<F1> and <Shift>-<F2> to cycle the view in the left and right windows, respectively. The available camera views in single-player games are Rear View and Guide-Bot view. In multiplayer games, the choices are Rear View, Teammate View, and Marker View(s).

Cockpit View

Use <F3> to toggle between full cockpit and status bar modes. (Note that the cockpit and status bar are not available in some screen resolutions.) When in Status Bar mode, you can also use the +/- keys to increase and decrease the size of your

window. In the largest window size, the status bar is not avail-
able. Smaller window sizes will provide faster graphics
updates.

Rear View

To look out the rear of your ship, press <R> (you can
change this key in the Controls menu). If you hold down the
<R> key you will see a rear view until the key is released. To
switch indefinitely to the rear view, quickly tap the <R> key. The
rear view can also be displayed using the <SHIFT>-<F1>/<F2>
camera view windows.

DEMOS & SCREENSHOTS

Sorry, DESCENT 1 Demos are incompatible with DESCENT II playback.

Descent II has a fully integrated demo recording and playback system. This recording will work in single or multiplayer games, so you can have a permanent record of blasting your friends to pieces.

Hitting <F5> in the game will turn on recording. Hitting it again will turn it off and prompt you for a filename. If you press <ESC> from the filename box, the demo will NOT be saved. The demos will record the advance from one level to the next; however, the escape sequences will be skipped in playback.

Demo files are saved in your Descent II game directory and have the file name extension ".DEM". Of course, Descent DEM files may be distributed freely.

> ***NOTE: Descent .DEM files can become quite large on disk. This is especially true when recording heavy combat. Make sure you have adequate disk space before recording. If you have less than 500k free on disk, you won't be allowed to record a demo.***

To view a recorded demo, choose View Demo from the Descent II menu. During playback, the following keys are available:

[UP ARROW]	PLAY
[DOWN ARROW]	STOP
[LEFT ARROW]	SINGLE FRAME REVERSE
[RIGHT ARROW]	SINGLE FRAME FORWARD
[SHIFT + LEFT ARROW]	FAST REVERSE
[SHIFT + RIGHT ARROW]	FAST FORWARD
[CTRL + LEFT ARROW]	GO TO START OF A DEMO
[CTRL + RIGHT ARROW]	GO TO END OF A DEMO

Certain gauges and other items won't display accurately in demo playback in order to minimize the space needed for demo files.

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Screenshots can be taken by hitting the PRINT SCREEN key. The files are written to the Descent II directory with the name convention SCREENxx.PCX. The number xx starts at 00 and will increment automatically each time you save a screenshot. The counter resets at 0 each time you start Descent II. You may save up to 100 screenshots.

Screenshot pictures are saved in PCX format. A small DOS-based program called PCXVIEW (in your Descent II directory) can be used to view the screenshots.

Using Special Joysticks & Controllers

Thrustmaster, Gravis Phoenix, CH, and Logitech controls are fully supported by Descent II. The device control files (DESCENT2.ADV, DESCENT2.M50, D2WCS.M50, D2TQS.M50, DESCENT.PHX, and DESCENT.KEY) can be found in the \CONTROLS subdirectory on your Descent II CD.

See the README.TXT file for full explanation of these special controls.

VR Headset Information

Descent II fully supports most VR Head–Mounted Displays. To enable support for a given VR device, use the SETUP program. During the game, the following keys are used for VR settings:

ALT-F5	TOGGLE VICTORMAXX MODE
ALT-F6	CYCLE VR RESOLUTION
ALT-F7	SWITCH LEFT/RIGHT EYE DISPLAYS
ALT-F8	CYCLE HEAD TRACKING SENSITIVITY
ALT-F9	CYCLE HEADSET TYPE
ALT-F10	TOGGLE HUD

MULTIPLAYER GAMES

This section contains information specific to multiplayer games. Descent II supports multiplayer games over a modem, direct serial connection, or IPX network.

Special Keys

There are several keys that perform special functions in Multiplayer games.

ACCEPT PLAYER ENTRY <F6>: Available only in Restricted games. When a new player attempts to join, one in-game player is given a message and the option of hitting <F6> to accept him/her into to the game. If no acceptance is made in 5 seconds, the new player is denied.

CHOOSE NEW PLAYER TEAM (ALT-1/ALT-2) When a new player attempts to join a Capture-the-Flag or Team Anarchy game, one in-game player is asked to choose which team the new player will be on. Press <ALT>-1 to choose Team 1, or <ALT>-2 to choose Team 2. If no key is pressed in five seconds, the new player is not allowed into the game.

TEAMMATE ID DISPLAY (ALT-F6): Available in Network Team and Cooperative games only. If enabled, this will show a teammate's name if he is in your sights. If the "Show all players on HUD" option was set when the game was started, all players

(not just teammates) will be displayed. Hitting <ALT>-<F6> will turn this on/off.

KILL LIST DISPLAY (F7): This toggles the Multiplayer Kill List on/off. In Network Team games, this alternates the display between Player Kills, Team Kills, Efficiency Scores, and no kill display. The efficiency score is defined as KILLS/(KILLS+DEATHS). Therefore, a player with 5 kills and 0 deaths would have a perfect 100% Efficiency Score. Someone with 5 kills and 2 deaths would have a 71% Efficiency Score.

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SEND MESSAGE (F8): Lets you type a message to other player(s). You may address a message to a specific player or players by starting the message with a name followed by a colon. For example, sending the message "ST:My hat is red!" will send the message "My hat is red!" to any players with "ST" as their name (or the first two characters of their name). This would include the players STEVE or STACY. If no name is given, the message will be sent to everyone. If no match can be found for a given name, the message will not be sent.

In Team Anarchy, addressing messages to "1:" or "2:" will send them only to members of Team 1 and Team 2, respectively.

You may substitute a player's name in a message by using the $ character. Any occurances of the $ in a message will be replace by the name of the player receiving the message. For example, if you are playing against Scourge and Alchemy and send the message "Hey, $, you're funny–lookin!", the message will appear on Scourge's screen as "Hey, Scourge, you're funny–lookin!" and on Alchemy's screen as "Hey, Alchemy, you're funny–lookin!"

TAUNT MACROS (F9-F12): These keys send one of four predefined messages with one keypress. By using <SHIFT>, you can define or re-define what <F9>-<F12> will send. For example, hitting <SHIFT>-<F10> will let you change the message sent when <F10> is pressed. Message addressing using ":" is available in macros as well (see above). Taunt Macros are stored in your pilot file for future games.

MARKER CAMERAS (F4): In multiplayer games, markers can be used as surveillance cameras. After dropping a marker in a multiplayer game, use <SHIFT>-<F1> or <SHIFT>-<F2> to select a camera view from your marker. Marker cameras may be disallowed in the Start Netgame/More Options menu.

DROP FLAG (ALT-0): In Capture-the-Flag games, you can drop the flag (if you have it) by pressing ALT-0.

MULTIPLAYER GAME INFO (PAUSE): Pressing PAUSE in a multiplayer game will bring up an information window describing various properties about the netgame, such as game mode, packet loss, and who is currently master of this game. Press <Esc> to leave this window. Note: You will still be vulnerable to attack while you are viewing this window.

Special rules/features

Some special rules and features apply to Multiplayer Descent II Games.

- Multiplayer handicapping. If someone wishes to handicap themselves, they may use F8 to send the following message: "handicap:xxx" where xxx is a number from 10-100. From that point on, the player who sent the message will have xxx shields when they reappear after dying. When a player changes his/her handicap, a message is sent to everyone to announce it.

- When players are killed, they drop their weapons and powerups! This also means that if there is only one Spreadfire Cannon placed in a level, only one player can have it at a time. If you want a certain weapon, you may have to beat it out of someone!

- When you fire secondary weapons in a multiplayer game, a new powerup of that type is created randomly somewhere in the mine. This keeps the number of weapons in the game constant. If you see a weapon suddenly appear in front of your ship, consider yourself lucky!   Cloak/Invulnerability replacements are created when these effects wear off of a player. Concussion Missiles do not replace themselves.

- Bringing up a menu in Multiplayer Descent II does NOT stop the action. Your ship is still vulnerable to attack. If you need to spend time in a menu, find a place to hide. If you're attacked while in a menu, the game will automatically return you to the game so you can defend

yourself. It will also return you from menus if the reactor is about to explode.

• When you leave a multiplayer game, your powerups are dropped before your ship disappears.

• When you hit the PAUSE key in a netgame, you will be shown an info screen outlining the game type, mode, and other options chosen for that game.

Modem/Serial Games

NOTE: If you experience any problems, see the README.TXT for troubleshooting tips and solutions, or call Interplay Technical Support.

<u>MODEM/SERIAL SETUP</u>

Before attempting to start a serial game, both users should check the Com Settings menu to verify that the options are correct. Any changes are saved for future games.

NOTE: Games using a null-modem cable require that both machines use the same baud rate in the Com Settings menu. Modem games, however, do not require this.

If your machine does not have a 16450 UART, you should choose 9600 or 19200 baud. The higher the baud rate, the better Descent II will perform. If your computer has a 16550 UART, you can use 38400 baud rate for optimum performance. If you are unsure what type of UART your machine has, you can try selecting the 38400 baud rate option. Descent II will tell you if it does not detect the 16550 UART required for 38400.

For modem users, note that changing the baud rate in the Com Settings menu actually sets the rate of communication between the computer and the modem. Even though many modems do not support actual baud rates above 14400, it is still

better to choose a 38400 baud rate in the menu. This will allow Descent II to spend less time communicating with the modem, and will increase game performance.

Modem Descent II requires at least a 9600 baud modem with an error correction protocol (preferably v.42). Data compression is also helpful, and should be enabled in the modem (v.42bis is preferable). The modem should respond to a drop in the DTR control line by hanging up. Fortunately, most modern modems have adequate factory settings for playing Descent II.

If you receive good performance at 9600 baud or above when using your modem for things like on-line services, no special initialization string should be necessary to run Descent II ("ATZ" will do nicely). If your modem is something more exotic, you may wish to use an init string of "AT&F" to reset it to factory defaults, which should work great with Descent II.

<u>CONNECTING</u>

NOTE: If you are using a serial port with a non-standard IRQ, you will need to use the Custom option in the Com Settings menu. Pressing <RETURN> while on this checkbox will allow you to change the settings.

Starting a game of Serial Descent II is a two-stage procedure. First, a link must be established between two machines. This is accomplished differently depending on what type of game you are playing.

If you are establishing a null-modem cable link, both players must select "Establish Null-Modem Link" from the serial game menu. After the two computers have established a connection over the null-modem cable you will be returned to the menu and should have new options available to you.

If the two machines fail to achieve a link, check the serial parameters on both sides. The baud rate settings must be identical on both sides for them to communicate properly.   After establishing the null-modem link, one machine is designated as the master and the other is the slave. This is not visible from the menu, but when you go to start game, only one of the two machines will prompt for the game settings to use. See Starting a Game below for more information.

If you are starting a modem game, one person must select Dial Modem from the serial game menu and the other must select Answer modem. After the modems connect, you will be returned to the serial game menu and new options will be available to you.

STARTING A MODEM/SERIAL GAME

You should now see the "Start Game" option on your menu. The blue line should indicate if you are connected or not. When selecting Start Game, one player will be offered a menu of game options such as start level and game mode. See the description of these items under "IPX Network Games" below. If a modem is being used, the person who dialed will need to choose the game options, while the other waits for him/her to start. In null-modem games the starter is randomly determined. After this, both players will be placed in the mine and the game begins.

After the game is finished or if one of the players decides to leave the game, both players are returned to the serial game menu. The communication link is STILL ACTIVE, however. If you want to play another game, perhaps with different settings or a different starting level, just select Start Game once again. If you want to hang up the modem or release the null-modem connection, select Close Link.

Another feature of the modem game is the ability to send messages back and forth between connected players before they are in the game. You can do this by selecting Send Message from the Serial Game menu. This option is only available once a connection has been established. This is useful if you do not have an extra phone line for voice communication while playing and you need to negotiate the terms of the game. Another feature is automatic notification when a game is starting.

If one player selects Start Game but the other does not, the person who didn't start will be informed that the other player is ready. If the user isn't prepared to start yet, the first user will be notified. Make sure you select Close Link or exit the serial game menu if you're finished with the modem game. If you do not, the modem will remain connected to the other player.

PHONE BOOK

A small phonebook is available from the dial menu of the serial game menu. This lets you store the names and phone numbers of your eight most frequent opponents. To edit the phonebook, go to the Dial menu and select Edit Phonebook.

IPX Network Games

A special note regarding DESCENT II and KALI:

KALI is a commonly-used utility to allow IPX network play over a TCP/IP network (such as the Internet). Although Descent II does not officially support KALI, netgames use several features that allow playing games via KALI easier. While high-latency connections over KALI will always be problematic, gameplay should be generally smoother with Descent II. Useful features include the Small Packets option, the Max Players slider, and the Restricted Game mode, and a system to help control the "reproducing powerups" problem seen in many KALI

games. While Interplay and Parallax cannot provide technical support for KALI and similar tools, more information can be found at the Official KALI homepage at http://www.axxis.com/kali.

Netgame Requirements

Descent II is designed to run on networks using the IPX protocol. To use IPX protocol on your LAN-connected PC, you must be loading the IPX.COM driver provided by Novell, in addition to lower-level drivers required by your particular brand of network card.

Netgame Setup

Descent II supports up to 12 simultaneous network games on a single socket. If you need to run more than 12 games on a single LAN, players can use the Socket option in the Start Netgame/More Options menu. Joining players will need to change to the same socket from the Join Netgame menu. Descent II uses a default socket number of 5110(Hex). This option can be used to avoid socket conflicts with other network services should they arise. Also, if you are on a large network with many games playing, you can use a different socket to run the game from. Hitting PgUp/PgDn from the Join menu will allow you to find such games.

One person playing must select Start Netgame from the Multiplayer menu. The player must choose which mission to conduct the netgame on (all players must have the chosen mission files). Once the mission is chosen, a list of netgame options appear. The starting parameters are explained below:

MULTIPLAYER GAMES

Starting a Netgame
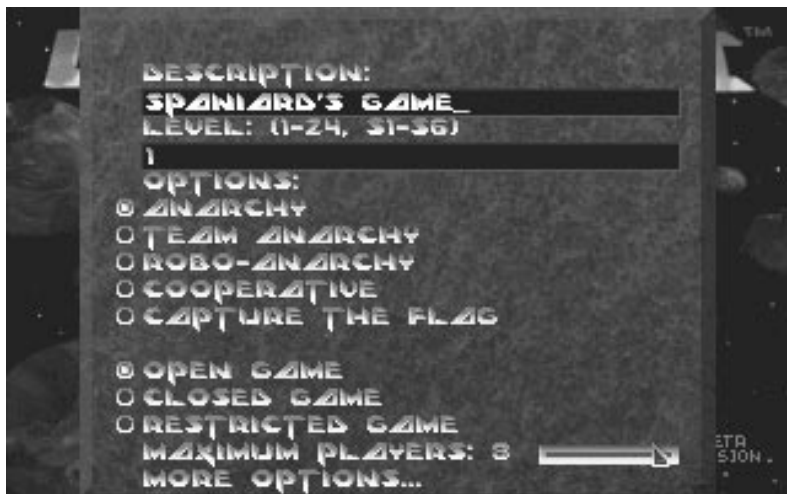
Start Netgame Menu:

DESCRIPTION: The name of the game, literally. This is the name other people will see when they are choosing a game to join.

LEVEL: The level the game will start on. Play may progress to other levels during the game.

MODE: Determines type of game to be played. You must choose one of the following:

ANARCHY: A human-only free-for-all battle to the death. The goal is to accumulate the most kills.

TEAM ANARCHY: Same as Anarchy, but with teams.

<u>ROBO-ANARCHY:</u> Same as Anarchy, but with robots thrown in. The goal is still to kill your human opponents; however, the robots have their own agenda... Robots are also a good source of powerups.

<u>COOPERATIVE:</u> Humans vs. the robots. Save humanity!

<u>CAPTURE–THE–FLAG:</u> This is a variant of the Team Anarchy game. When teams are selected and the game has begun, each team's objective will be to capture the opponent team's flag (located somewhere in the mine and colored to match the opposing team's color). Once a flag is captured, the players must bring it back to their team's "base." These bases appear somewhere in the level, identified by the team's color. So the Blue team tries to capture the red flag and bring it to the blue goal. If a flag-carrying player is destroyed, the flag will be dropped. When a "goal" is made, that team member will receive 5 kill points, and the flag will be regenerated randomly somewhere on the level. A player carrying a flag can use <ALT>-0 to drop that flag.

You must chose one of the following to determine if people will be allowed to join your game in progress:

<u>OPEN GAME:</u> Open games allow any new players to join the game in progress.

<u>CLOSED GAME:</u> Determines whether or not new players will be allowed to join once the game has started. If you have checked the Closed Game box, only the starting players will be in the game.

Note that even in Closed games, the starting players are allowed to leave Descent II and rejoin at any time.

RESTRICTED GAME: This new Descent II mode operates the same as Open games with one change. When a new player attempts to join a Restricted game, one of the current players will be sent a message, giving him/her the

option of hitting <F6> to accept that player. If the acceptance isn't given within five seconds, the player is denied entry. Denied players may attempt to join as often as they wish.

MAXIMUM PLAYERS: This slider allows you to limit the maximum number of players allowed in the game, with a maximum of eight. Cooperative Mode only allows four players max.

More Options Menu

ADDITIONAL NETGAME OPTIONS

DIFFICULTY:
REACTOR LIFE: 0 MIN
MAX TIME: 0 MIN
KILL GOAL: 0 KILLS
☒ ALLOW CAMERA VIEWS FROM MARKERS
☐ INDESTRUCTIBLE LIGHTS
☐ SHOW ALL PLAYER NAMES ON DISPLAY
☐ SHOW ALL PLAYERS ON AUTOMAP
☐ SPEEDY FUN PACKETS
SET OBJECTS ALLOWED...
NETWORK SOCKET
0
PACKETS PER SECOND (2 - 20)
10
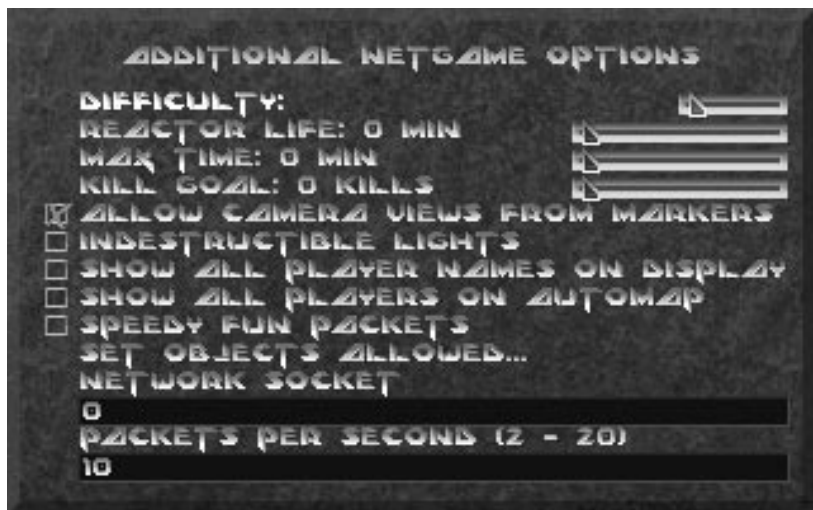
This menu contains advanced options for multiplayer games. You do not need to change any of these items if you do not wish to.

DIFFICULTY: This determines many factors from robot awareness and deadliness to time for mine destruction countdowns. If the slider is to the left the game will be easier; to the right, it will be harder.

REACTOR LIFE: Determines how long, in minutes, the reactor will be invulnerable. Until this time limit has expired, no one may destroy the reactor to advance to the next level.

MAX TIME: Determines the time, in minutes, each level will be allowed.   At the end of this time period, the reactor will detonate itself and advance the level.

KILL GOAL: Determines how many kills to allow before advancing the level. Once a player has achieved this number of kills on a level, the reactor will detonate and advance the level. The player that reached the kill goal will have his shields boosted to 200.

ALLOW CAMERA VIEWS FROM MARKERS: This toggle will enable/disable the players' ability to use the <SHIFT>-F1/F2 camera views from markers he/she has placed.

INDESTRUCTIBLE LIGHTS : Prevents players from blowing lights out.

SHOW ALL PLAYERS ON AUTOMAP: Self–explanatory.

SHOW ALL PLAYER NAMES ON HUD: With this enabled, all player names will be drawn on the HUD display (regardless of teams) when their ships come into view.

SHORT PACKETS: Reduces the size of the "packets" transmitted over the network during an IPX game. This will improve performance on a heavily-trafficked network, but will cause player ships to turn less smoothly.

<u>SET OBJECTS ALLOWED:</u> This screen allows the person starting the game to disallow any Descent II weapons and objects. Disallowed objects will be replaced with shield powerups.

<u>NETWORK SOCKET</u>: This allows you to start the netgame on a different socket number. NOTE: joining players must change to the same socket number in the Join Netgame menu.

<u>PACKETS PER SECOND:</u> This will change the maximum number of player position packets each machine sends per second during the game. If your netgame appears slow or suffers from problems related to lost packets (players jump around, hits not registering, removable walls not disappearing) lowering this number may help. You can raise this number (to a maximum of 20) if all players are on the same subnet and you desire a smoother game. The default value is 10.

When you've set all the parameters for your game, press <ENTER> from the Start Netgame menu.

The next screen allows you to select players for your game. As each player selects your game from the Join Game screen, his/her name will appear on your list. By default, all players wishing to join will be selected, but you can deselect them by pressing the spacebar on their checkbox. Press ENTER to start the action. Up to 12 players will be shown on this menu. You may select up to eight for an Anarchy game, and up to four for a Co-op game.

Team Selection

If you've chosen a Team or Capture-the-Flag game, the next screen will be Team Selection. Team names can be modified in the text boxes. Pressing <ENTER> on a player's name will move him/her to the other team. Team 1 ships will be col-

ored BLUE and Team 2 ships will be RED. Press <ESC> to accept the teams and start the game.

Joining a Netgame
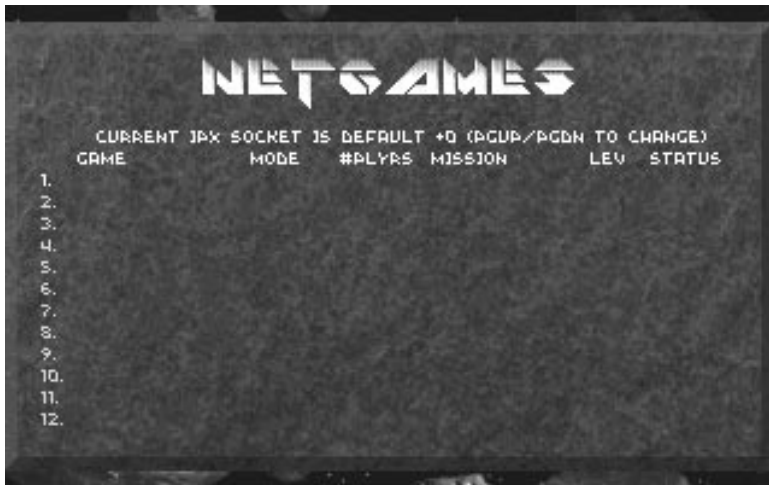
Choose Join Netgame from the Multiplayer menu. The next screen will show you all active netgames on that socket. Below each game is listed the current level number, number of people playing, and game status.

> *NOTE: Games may be running on non-default sockets. Use PgUp and PgDn to see games running on different sockets.*

Netgame status will be one of the following:

<u>FORMING:</u> Game is in player-selection phase. Anyone may attempt to join a forming netgame.

OPEN: This means the game is in progress, and you may join at any time.

CLOSED: The game is playing, but closed to new players.

RESTRICT: The game is Restricted. When a player attempts to join the game, one player already in the game will be given the choice of accepting the new player or not.

FULL: The game has reached its maximum number of players. To join, you must wait for someone to leave it.

BETWEEN: The game is in progress, but the players are rushing for the escape tunnel. If you wait for the level to advance, it will change to JOIN and you can then hop in. Closed netgames will never show this message.

Rejoining a Netgame

If you leave a netgame for any reason, you may rejoin the ongoing game when you're ready. Although you lose accumulated items, you will retain your ship color and kill count unless you've been gone long enough for someone new to have taken your spot. Make sure you rejoin from the same computer using the same pilot name so the game knows you as a previously-joined player. If enough new players have joined since you left, it's possible your kill count will have been discarded.

ANARCHY SUMMARIES

At the end of each level in an Anarchy game, an Anarchy Summary screen will come up. This shows a kill matrix of who killed who and how many times. In the rightmost column you'll see the Total kills and Efficiency Score. The Efficiency Score is defined as KILLS/(KILLS+DEATHS). Therefore, a player with 5 kills and 0 deaths would have a perfect 100% Efficiency Score. Someone with 5 kills and 2

deaths would have a 71% Efficiency. Players with no kills will show N/A in this field.

MEASURING NETWORK PERFORMANCE (PING)

While in a multiplayer game, it is possible to measure the time it takes information to be sent between yourself and another player. By pressing F8 and typing "ping:<player>", where <player> is the name of another player, the game sends a message to that player's computer and measures how long it takes that message to get there and return (in milliseconds). This time will be displayed on your HUD. On a LAN, you should expect times below 100ms. On a WAN (such as the Internet), times below 300 are acceptable. Players with very slow response times will behave poorly in multiplayer games.

Regardless of configuration, you should have no trouble running Descent II. But in the unlikely case you do have problems, consult this section. Also consult the README.TXT file for up-to-date questions and answers.

General Problems

Q: THE INTRO MOVIE JERKS AROUND AND THE SOUND STUTTERS. WHAT'S WRONG?

A: Your system may only be able to handle the low-resolution movies. Try going into SETUP and changing them from High to Low.

Q: WHY DON'T I HEAR ANY MUSIC DURING THE LEVELS?

A: Your redbook audio cable may not be connected properly. If you fail to hear the redbook test song in SETUP, consult your sound card manual on the installation of the cable, or call Interplay Tech Support.

Q: I CAN'T GET SOUND TO WORK PROPERLY UNDER WINDOWS 95™.

A: Make sure you have a sound device installed under Win95. Check the System Control Panel, or Multimedia Control Panel for your sound card (if there's no Multimedia Control Panel, Windows 95 doesn't know you have a sound card.)

Q: DESCENT II DOESN'T SEEM TO HAVE SOME OF THE COOL SOUND EFFECTS IT USED TO. FOR EXAMPLE, MY FLARES MAKE LASER FIRING SOUNDS.

A: If there is less than 5 MB of available physical memory, Descent II "recycles" sound effects to save memory. Increase your available physical memory above 5 MB, and all sound effects will be loaded. Another option is to run with the NoLowMem command line option. This forces Descent II to use all sound effects regardless of available memory. However, Descent II may run slower with this option.

Q: DESCENT II RUNS SLOWLY ON MY MACHINE, ESPECIALLY IN LARGE BATTLES. WHAT CAN I DO?

A: Try one or all of the following:

- Using <F3> and +/- to shrink your 3D window size.

- Lowering any/all of the detail level sliders in the Options/Detail level screen.

- Use <SHIFT>-<F1/F2> to remove any secondary views you may use.

- If you are running under Windows95 on a machine with less than 16MB, try installing and running the DOS version of Descent II.

Q: I HAVE A SMALL GAME WINDOW AND A LOW DETAIL LEVEL, BUT DESCENT II STILL LOADS AND RUNS SLOWLY.

A: Check your sound card settings in SETUP. Incorrect settings can cause significant slowdown.

Modem/Serial Problems

Q: MY MODEM GAMES ARE MUCH SLOWER THAN NORMAL ONE-PLAYER GAMES.

A: Try using a higher baud rate in the Com Settings menu. If your computer does not have a 16550 UART, acquiring one will allow up to 38400 baud when communicating with the modem. Consult your Descent Manual for details.

Q: STRANGE THINGS HAPPEN IN MY MODEM/NULL-MODEM GAMES. WHAT CAN I DO TO HELP THIS?

A: This may be a result of dropped serial characters. Some examples of "strange" things: players not dropping powerups when killed, ships jumping from place to place on screen, or ships flying through doors that appear closed. Error messages during play or during the "waiting for opponent" screen could be the cause of the problem as well.

These problems may occur for several reasons. Serial play adds an additional burden to the CPU when playing the game, so a computer capable of playing the game in single-player mode may have difficulties with modem or serial play. If you are using an 8-megabyte machine, the disk activity needed to run the program in a small memory space can cause lost characters. A lot of sound activity can also cause lost serial characters. Increasing the RAM for the game or reducing the number of sound channels in the detail settings menu can sometimes help. Of course you can also reduce the baud rate in the Com Settings menu to slow down the game somewhat while improving reliability. Also try setting your music volume slider to 0 in the Options menu.

The best thing you can do to improve serial performance is to equip your machine with a 16550 UART. However, even with this UART, 38.4k baud rate can still be problematic if you have the burden of low RAM or heavy sound activity–so don't be ashamed to run a 16550 UART at 19.2k baud if need be.

Netgame Problems

Q: STRANGE THINGS HAPPEN WHEN PLAYING DESCENT II UNDER KALI/IHHD. HITS DON'T REGISTER ON MY OPPONENTS, THEIR SHIPS SEEM TO "JUMP" AROUND A LOT, ETC. WHAT CAN I DO?

A: While Descent II isn't really designed for slow connection games such as these, you may be able to improve them. One thing that may help is starting the netgame with a lower Packets per Second value (under Multiplayer/Start Netgame/More Options). You can also try enabling the Short Packets option under Multiplayer/Start/More Options. This will cause ships to "jump" around a bit more than usual, but will decrease overall net traffic.

Q: DESCENT II TELLS ME MY NETWORK CARD IS MISSING PACKETS. WHAT THE HECK DOES THAT MEAN?

A: This can be a result of a slow network card, heavy traffic on the network, or software conflicts in your system. If you get this message, you can rejoin the game and try again. If the problem persists, one of the following could be to blame:

- TOO MANY PACKETS BEING SENT. Descent II is optimized for play over LAN-based networks. Slow LANs or WAN-based games (like KALI or IHHD) may be too slow to guarantee processing of all packets. Lowering the Packets per Second value in the Start Netgame/More Options menu (to a number less than 10) may improve things.

- LOOSE CABLES. Happens to the best of us. Check the plugs on the back of your computer, specifically the ones running to/from your network card.

- TOO MANY PLAYERS. While 8 players is offered as the maximum in Descent II, it's possible that your LAN or computer configuration can only support 4-6 players reliably.

- BAD NETWORK CARD. Some cards drop IPX packets even without heavy loads or interference. If you suspect your LAN card, try swapping it with one from another computer.

- SOFTWARE CONFLICTS. Other drivers may be running that cause problems with the net work interrupts. These conflicts may not emerge when performing other LAN tasks that either don't use IPX or have layers of error-checking. Try removing unneeded drivers from your CONFIG.SYS and AUTOEXEC.BAT.

- ROUTER PROBLEMS. Playing Descent with players on different sides of a router may cause lost packets or delays. Playing this way is not recommended because it creates a significant load on the router that may disturb other LAN users.

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CUSTOMER SUPPORT

If you have any questions about this, or any other Interplay product, you can reach our Customer Service/Technical Support Group at:

Interplay, 17922 Fitch Avenue, Irvine, CA 92714 Attn: Customer Service. Customer Service is available 24 hours a day through our Automated Customer Service system, with a Customer Service representative available during normal business hours at (714) 553-6678.

Please have your system information available, or better yet, try to be at your computer. The more detailed information you can provide our support personnel, the better service we can provide you.

Hintline

Although hints are not available for this game, hints are available for other Interplay games. You can reach our hintline at 1-900-370-PLAY (1-900-451-6869 in Canada). The charge for this service is $1.25 for the first minute and $.75 for each additional minute. All hint questions must be directed to this "900" service. No hints will be given on our Customer Service lines. You must have a touchtone phone to use this service. The hintline is open 24 hours a day. All long distance charges are included in these prices. Callers under the age of 18 must get parental permission before calling the hintline. The hintline is only available in the U.S. Charges subject to change without notice.

If you have a modem, you can reach us at the following:

The Interplay BBS: We have a 24-hour, 7-day a week multiline BBS available for customer
questions, support and fixes. The number is 714-252-2822. Modem settings are 300-28.8k Baud, V.32bis, V.42bis, 8-N-1. You also may contact our BBS over the Internet.
Telnet to bbs.interplay.com. This is a free service. (Excluding toll charges.)

America Online: You can E-mail Interplay Customer Support at IPTECH. To reach our
Customer Support board in the Industry Connection, press CTRL-K for "Go To Keyword." Then type INTERPLAY in the Keyword window. In addition to reading and leaving messages, you can download fixes and demos from the "Software Libraries."

CompuServe: We are available for IBM and compatible on-line support. We are located in the
Game Publishers B Forum, type GO GAMBPUB at any "!" prompt. Then select "Section 4" for Interplay Productions. You can leave technical support questions there. You can also download fixes and demos from Library 4 in GAMBPUB. The best place for game play hints about our games is in the GAMERS forum. If you are not already a CompuServe member, you can call CompuServe toll-free at 1-800-524-3388 and ask Representative #354 for a free introductory membership and a $15 usage credit. For game play hints look in the Gamer's Forum (GO GAMERS). Besides technical support for Interplay products, CompuServe offers many other services, including communications, reference libraries, hardware and software support, travel, games and much more.

GEnie: We are located in the Games RoundTable by Scorpia, type M805;1 at any "?" prompt. Then
select "Category 13" for Interplay Productions. Fixes and demos are available in the libraries.

PRODIGY® Interactive Personal Service: You may send mail directly to us.
Our ID is "PLAY99B".

Internet: You can reach Interplay by sending E-mail to "support@interplay.com". Many Interplay
demos and patches are available at Internet FTP sites. To visit our World Wide Web site, point your browser to: "http://www.interplay.com" or you may ftp to ftp.interplay.com.

INTERPLAY PRODUCTIONS

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WARRANTY REPLACEMENTS
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System Upgrades

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Welcome to the Interplay Web! As a company dedicated to providing innovative, high-quality interactive entertainment software, we are always striving to stay as close as possible to the leading edge of technology. This Web site is the latest example of our ongoing effort to provide a wealth of information and opportunities to you.

As a company of fanatic gamers, we love the idea of gamers all over the world tapping into cyberspace to see, touch and feel our latest games. No hype, no marketing campaign; just great games. To make it work, our goal is to keep this site fresh and new, to make it a place where you can tell US what you like about our games... and what you don't like about them. So use the feedback options on these pages and sound off.

Enjoy your visit in our Web site, explore all the different areas we have to offer, and come back soon. Check us out in the weeks and months ahead; we will be introducing new and exciting areas for you to experience.

Once again, welcome!

Brian Fargo

HOW TO GET THERE

Interplay's World Wide Web site is an Internet service designed to give you the latest information about Interplay and our products.

The site features our demos, upgrades, product information and ordering information.

From your Internet account, point your favorite browser to:

http://www.interplay.com