SCAVENGERS
OF THE MUTANT WORLD
Interstel Corporation

presents

SCAVENGERS
OF THE MUTANT WORLD™

Instruction Manual

For the
IBM® PC and compatibles/
Tandy® version

by
Richard Launius,
Bruce Beaumont,
and
Chris Stassen
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CONTENTS

INTRODUCTION .......................................................... 1
SCAVENGERS Installation and Use .................................... 2
    The Right Computer Hardware ................................ 2
    Contents of the Distribution Disk .......................... 2
    Backing Up the Distribution Disk ......................... 2
    Installation on a Hard Disk ................................ 3
How to Start SCAVENGERS ........................................... 3
    Playing from a Floppy Disk ............................... 3
    Playing from a Hard Disk ................................. 3
    Game Options .................................................. 3
SCAVENGERS Security System ....................................... 4
THE MAIN MENU ......................................................... 5
    Specifying the World Disk Path ........................... 5
    Creating a New World Disk .................................. 6
Modifying a Character .............................................. 7
    Editing a Character's Picture ............................ 7
Playing the Game ..................................................... 10
    Selecting a Party ........................................... 10
    The Map Display ............................................. 10
    Entering Commands ......................................... 12
    Alphabetical Command List ................................ 12
        Arm ......................................................... 13
        Attributes .............................................. 13
        Board ..................................................... 13
        Build .................................................... 13
        Camp ..................................................... 13
        Census .................................................... 13
        Date ....................................................... 14
        Distribute Food ........................................ 14
        Dismount ................................................ 14
        Don ......................................................... 14
        Drop ....................................................... 14
        East ......................................................... 14
        Go in or out ............................................... 14
        Grab ....................................................... 15
        Grab All ................................................ 15
        Hand ....................................................... 15
        Identify .................................................. 15
        Inventory ................................................ 15
        Join ........................................................ 15
        Keymap .................................................... 16
        Leave ....................................................... 16
        Logging .................................................... 16
        Map ........................................................ 16

SCAVENGERS OF THE MUTANT WORLD
Mount .............................................. 16
Mutations ........................................ 16
North .............................................. 17
Northeast ........................................ 17
Northwest ....................................... 17
Options ........................................... 17
Quit ............................................... 17
Read .............................................. 17
South .............................................. 18
Southeast ....................................... 18
Southwest ....................................... 18
Take Apart ...................................... 18
Use .............................................. 18
West .............................................. 18
Battle Mode ..................................... 20
Direct Battle Mode ......................... 21
Relative Battle Mode ...................... 22
Visiting Lau's Storerooms ............. 23
Back Up the World ......................... 24
Back Up a Floppy Disk Game .......... 25
Back Up a Hard Disk Game .......... 25
Tandy Keypad Support ................. 25
FINAL WORD .................................... 27
Credits ......................................... 27
Authors'Notes ................................. 28
Authors'Biographies ..................... 29
Interstel Product Warranty .......... 30
Product Replacement .................. 30
Product Upgrade/Update Plan ........ 30
Product Registration .................. 30
INDEX ........................................... 31

TABLES PAGE
I CHARACTER EDITING KEY COMMANDS 9
II FUNCTION KEY COMMANDS 19

FIGURES PAGE
1 Sample Map Display Screen 11
2 Numeric Keypad Commands 19
3 Direct Battle Mode Key Commands 21
4 Relative Battle Mode Key Commands 22
5 Storeroom Management Key Commands 23

SCAVENGERS OF THE MUTANT WORLD
INTRODUCTION

SCAVENGERS OF THE MUTANT WORLD is a graphics adventure game set in a post-holocaust future. The world is comprised of a variety of terrain types, including a number of city ruins, in which are hidden all sorts of interesting objects and mutant monsters. Starting from your home base in the city of Lau, your team ventures out to explore the world and search for items which will be of use to the team during the journey or to the people of Lau.

SCAVENGERS is not a "real-time" game; it plays more like a board game than an arcade game. When it is your turn, nothing will happen until you enter a command. This may detract a small amount from the realism of the game, but it also brings some advantages. You can get up to answer the phone, get a drink, etc. and everything will be the same when you get back as it was when you left. If you are playing the game and you want to take a few minutes to plan your strategy, strange creatures will not run up and start beating on your characters while you are thinking.

After your turn, everyone else gets theirs. Some creatures may get more than one turn for every one of yours; some may get less, depending on how fast the creature is, and how time-consuming the action you took was. Creatures can attack you if they are next to you after your turn or theirs.

The commands don’t all take the same amount of game time. For example, it takes a lot longer to build something from a blueprint than it does to pick up a handful of rocks off the ground. Some commands, movement in particular, do not always take the same amount of time. It takes you longer to slog through a swamp than it does to trot along a paved road.

SCAVENGERS is intended to be more of a strategy game than a "hack and slash" game. While fighting monsters does increase the strength of the Party members, it doesn’t do much for the well-being of your Tribe. Some creatures frequently carry useful things, and are therefore good to attack. Some creatures are strong enough to wipe out the Party, and should be avoided.

Be sure to read the Scavengers Briefing Report provided in your game package. It contains a great deal of information needed to successfully accomplish your mission.
SCAVENGERS INSTALLATION AND USE

The Right Computer Hardware

SCAVENGERS requires an IBM®PC, XT, or AT or 100% compatible system with a minimum of 256K bytes of memory (192K must be available for user programs), an IBM CGA or compatible color graphics adapter and color display. Although only one double-sided floppy disk drive is required, a second floppy drive or hard disk will make playing the game easier.

Contents of the Distribution Disks

SCAVENGERS is distributed on two 5¼-inch diskettes, a "Game Disk" and a "World Disk Template", and one 3½-inch disk, which contains both Game Disk and World Disk Template files.

The Game Disk contains the SCAVENGERS programs. When you are ready to play the game, you will start it from this disk. The World Disk Template contains some data files that form the basis of a "World Disk". Before you play the game, you must make a copy of the World Disk Template onto another blank floppy disk or a hard disk. If playing from a 3½-inch disk, each player will need his own copy of the disk. You can also play SCAVENGERS from a RAM disk, provided that it has at least 320K bytes of space, and 192K bytes of memory left over for user programs.

Backing Up the Distribution Disks

Before starting the game, you should make backup copies of your distribution disks.

BE SURE YOUR ORIGINAL DISKS ARE WRITE-PROTECTED!

First, boot DOS. Then make a backup of both the Game Disk and the World Disk using the DISKCOPY program. You can issue this command even if your system only has one floppy disk drive. When the DISKCOPY program asks for the source diskette, place the Game Disk in the current drive. When the program asks for the target diskette, place a blank floppy disk in the specified drive. If you have only one disk drive, you may be asked to replace the source and target diskettes several times.

Repeat the process to make a backup of the World Disk Template, using another blank floppy. Then store the original game diskettes in a safe place, and use the backup copies as your playing disks.
Installation on a Hard Disk

A program called INSTALL.EXE has been provided which will install SCAVENGERS onto a hard disk or another floppy disk. To use this program, place the Game Disk in any drive, type INSTALL, and press [Return]. The program will then give you on-screen directions for the installation of the Game Disk and World Disk Template files. Remember that if you wish to have more than one World Disk, you must install the World Disk Template files to separate subdirectories.

HOW TO START SCAVENGERS

Playing from a Floppy Disk

Insert your playing copy of the Game Disk in the current drive, then type the following command:

SCAVENGERS [options] (Invokes the game)

Playing from a Hard Disk

Make the directory containing the files from the Game Disk the current directory, then invoke the game:

CD SCAVENGE (Makes the game directory the current directory)

SCAVENGERS [options] (Invokes the game)

Game Options

You can specify one or both of the following game options:

-s Starts SCAVENGERS in "silent" mode. All sound will be turned off. You can turn the sound back on during game play from the Main Menu or via the Options command.

path Allows you to specify a World Disk path other than the default disk drive. You can also specify the path from the Main Menu.
For example, the following command starts up **SCAVENGERS** with the World Disk on drive C, in subdirectory **SCAVENGE**, with the sound off:

**SCAVENGERS** -s \C\SCAVENGE

**SCAVENGERS** will first check your system for the minimum playing requirements. If, for example, you do not have a CGA adapter or there is insufficient memory, you will get an error message and the game will not run.

After starting the game, the **Interstel** logo and **SCAVENGERS** title screen will appear on your monitor. Press any key to stop the music during the screen. You will automatically be passed to the security system.

**SCAVENGERS SECURITY SYSTEM**

To protect your **SCAVENGERS** game against unauthorized use, a security system has been installed. This appears after the title and credit screens have been shown, and requires you to enter a certain word obtained from the **Scavengers Briefing Report** per the instructions given on your screen. The following rules apply when looking up the security words.

1. Page number is as printed at the bottom of the page (e.g., this is page 4).
2. A line is any row with typing on it, including titles (e.g., this is line 17). Lines in figures do not count, but lines in tables do count.
3. A word is any unbroken string of characters with a blank at either end: example, where b denotes a blank. Punctuation marks do not count.
4. The security words are taken from the **Scavengers Briefing Report**. Changes contained in any supplement or change sheets are not counted.

**EXAMPLES:** Find the first word from line 5 on page 7 - the correct word is "surface".
Find the third word from line 7 on page 10 - the correct word is "ruin".

If you pass the security test, the Main Menu will then be displayed.
THE MAIN MENU

The Main Menu is the hub of SCAVENGERS activity. From this menu you can create a new World Disk, play or resume the game, change player pictures, toggle the sound, change the World Disk path, or exit the game and return to DOS. Each of these functions is activated with a single letter key, shown in [brackets]. Below is a summary of the Main Menu commands.

[S]pecify the World Disk path: This command allows you to change the World Disk path.

[C]reate a new World Disk: This command allows you to build a new World Disk on your previously prepared diskette.

[M]odify a player's picture: If you want to be creative, you can modify the player pictures to ones of your own, or change a player's name.

[P]lay the game: Once you have created a World Disk, you can play or resume the game by entering this command.

[T]oggle sound: This command turns the sound off and on.

[E]xit to DOS: When you are done playing the game, you can use this command to return control to DOS.

When the Main Menu is ready to accept input, a short "beep" will sound (if sound is enabled).

SPECIFYING THE WORLD DISK PATH: [S]

To change the World Disk path, select [S] at the Main Menu. An underscore cursor (_) will appear at the end of the World Disk path shown in the box at the bottom of the screen. Use the backspace key to erase all or part of it, then type in the new path. For example, if the game was started with no World Disk path specified, the World Disk path might be shown as:

World Disk: A:

To use your World Disk on drive C in subdirectory "SCAVENGE", enter [S] at the Main Menu, then backspace over the "A:" and type in the new path:

World disk path: c:\scavenge
To “confirm” the command, press [Return] when you are done. To cancel the command, press the [Esc] key.

SCAVENGERS will parse the new path to make sure that it is a valid DOS path name, then redraw the path in the box. You should check that your changes were accepted before proceeding.

NOTE: SCAVENGERS has an affinity for CAPITAL LETTERS, so don’t be surprised if it capitalizes all or part of what you typed in.

CREATING A NEW WORLD DISK: [C]

Before you can play the game or modify a player’s picture, you must create a new World Disk. You should first copy the files from the World Disk template onto another floppy disk or hard disk, following the instructions on pp. 2-3.

SCAVENGERS makes “random” World Disks each time you invoke this part of the game. Since there are over four million possible World Disks, you can play SCAVENGERS over and over again and not play the same game twice.

To create a new World Disk, enter [C] at the Main Menu. The game will read in some information from the Game Disk, then ask you to mount the World Disk on the drive you specified with the Specify World Disk path command. To “confirm” this command, place the diskette in the specified drive and press [Return]. To cancel the command, press the [Esc] key.

NOTE: You may use this command to make a new World Disk on a previous World Disk without recopying all the files from the World Disk template. Be sure you want to do this before confirming the command. Once this command is confirmed, the contents of the old World Disk are lost forever.

While the World Disk is being created, an “Under Construction” picture will be displayed, and a ticker bar will appear at the bottom of the screen, slowly turning from red to green as the world creation progresses. It takes approximately six minutes on a standard PC to create a new World Disk, so be patient. Do not be concerned if the ticker bar finishes before disk activity is done. However, if no disk accesses are occurring after the ticker bar finishes, the game is probably hung. In this case, please record the World Number displayed on the screen and report the problem to Interstel.

When the World Disk has been successfully created, the game will ask you to replace the Game Disk (if necessary), and the Main Menu will reappear.
MODIFYING A CHARACTER: [M]

SCAVENGERS comes with an initial set of 20 player pictures on the World Disk Template. You may use the pictures "as is", rearrange them so that different characters have different pictures, modify the pictures, or draw your own. The picture file PLAYERS.PIC may be copied from one World Disk to another, so you can use your modified pictures in subsequent games.

To modify a character's picture, you must have created a complete World Disk with the Create command. Then press [M] to modify a player. You will be prompted to insert the World Disk, if necessary.

Five of the 20 character pictures will be displayed, labeled with their names and attributes underneath. One of the players will be "selected", indicated by a red box around the picture and attributes. To select a player for modification, use the right and left arrow keys to move the selection box over the player you want, then press [Return]. To see another group of five player pictures, use the up or down arrow keys. When you are done editing player pictures, press [Esc] to return to the Main Menu.

Editing a Character’s Picture

To edit a character's picture, select the player and press [Return]. The editing screen will then appear, showing an enlarged version of the player picture in the editing area, and the picture as it will actually appear on the Map Display screen in the "proof" area. A brief description of the function key commands will appear at the bottom of the screen, and a blinking cursor will be positioned at the upper left corner of both the editing and proof areas.

The first six function keys (F1 through F6) control the overall operation of the program. These keys perform the following functions:

[F1] Load a new character picture for editing. If you have modified the picture currently being displayed, you will be asked to confirm this command, since the modified picture will not be saved. The display of player pictures will appear again for you to select a new player to edit.

[F2] Fill the screen with a color. If you decide to draw a picture from scratch, you can use this command to fill the screen with the background color ([B]lue, [G]reen, [Y]ellow, or [R]ed) of your choice. Since the current picture will be lost, you must confirm this command if you have changed the picture. Press [Esc] to cancel the command.
[F3] **Name this character.** Use this command to change the character's name. You may enter up to ten characters (including spaces), then press [Return]. To cancel the command, press [Esc].

[F4] **Swap pictures.** You may use this command to exchange two of the pictures from the current set. The display of player pictures will appear again for you to select the picture to swap with this one. To cancel the command, use the [Esc] key.

[F5] **Save these changes.** This command makes your editing changes permanent, and cannot be canceled. It works very quickly; changes are not actually saved on disk until the end of the editing session.

[F6] **Quit this editing session.** Use this command to end the session and return to the player selection screen. If you have not used the [F5] command to save your editing changes, you will be asked for confirmation.

To change a picture, position the cursor over the pixel you want to change, then use the letter keys to change its color. The keys listed in Table I can be used to move the cursor without changing the pixels under it, or to color in the pixels. In addition, the keypad arrow keys can also be used to move the cursor in any direction without changing the pixel color.
**TABLE I**

<table>
<thead>
<tr>
<th>KEYSTROKE</th>
<th>KEYPAD KEY</th>
<th>COMMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>[H] or [Backspace]*</td>
<td>(4)</td>
<td>Move the cursor left by one pixel</td>
</tr>
<tr>
<td>[J]*</td>
<td>(2)</td>
<td>Move the cursor down by one pixel</td>
</tr>
<tr>
<td>[K]*</td>
<td>(8)</td>
<td>Move the cursor up by one pixel</td>
</tr>
<tr>
<td>[L] or [Space]*</td>
<td>(6)</td>
<td>Move the cursor right by one pixel</td>
</tr>
<tr>
<td>[Home]</td>
<td>(7)</td>
<td>Move the cursor up and left</td>
</tr>
<tr>
<td>[End]</td>
<td>(1)</td>
<td>Move the cursor down and left</td>
</tr>
<tr>
<td>[PgUp]</td>
<td>(9)</td>
<td>Move the cursor up and right</td>
</tr>
<tr>
<td>[PgDn]</td>
<td>(3)</td>
<td>Move the cursor down and right</td>
</tr>
<tr>
<td>[Tab]</td>
<td>-</td>
<td>Move the cursor to the next tab stop</td>
</tr>
<tr>
<td>[Shift][Tab]</td>
<td>-</td>
<td>Move the cursor to the previous tab</td>
</tr>
<tr>
<td>[b]</td>
<td>-</td>
<td>Make pixel blue, move cursor right</td>
</tr>
<tr>
<td>[B]</td>
<td>-</td>
<td>Make pixel blue, move cursor left</td>
</tr>
<tr>
<td>[r]</td>
<td>-</td>
<td>Make pixel red, move cursor right</td>
</tr>
<tr>
<td>[R]</td>
<td>-</td>
<td>Make pixel red, move cursor left</td>
</tr>
<tr>
<td>[g]</td>
<td>-</td>
<td>Make pixel green, move cursor right</td>
</tr>
<tr>
<td>[G]</td>
<td>-</td>
<td>Make pixel green, move cursor left</td>
</tr>
<tr>
<td>[y]</td>
<td>-</td>
<td>Make pixel yellow, move cursor right</td>
</tr>
<tr>
<td>[Y]</td>
<td>-</td>
<td>Make pixel yellow, move cursor left</td>
</tr>
<tr>
<td>[Ins]</td>
<td>(0)</td>
<td>Make pixel the same color as last one</td>
</tr>
<tr>
<td>[Del]</td>
<td>(.)</td>
<td>Make pixel the inverse of last one</td>
</tr>
</tbody>
</table>

* On the Tandy, the cursor arrow keys are also active.

The [Ins] key works like a "paintbrush". You "pick up paint" by pressing one of the letter keys to color a pixel. Thereafter, the "paint" stays on the [Ins] key until you change it by pressing another letter key. The [Del] key inverts colors. If the "paint" is blue, pressing [Del] colors a pixel yellow (and vice-versa). Red and green are also opposites. These keys also remember the direction (left or right) that you were moving the cursor.
PLAYING THE GAME: [P]

After you have created a World Disk, you can start or resume the game by pressing [P] at the Main Menu. The World Disk specified by the current World Disk path will be read into memory; you will be prompted to change diskettes, if necessary. Once you have started playing the game, you must not remove the World Disk from its drive.

Selecting a Party

The first time you start a new game, you must select the members of your Exploration Party. At this time, you will be presented with a display of four of the 20 characters, along with their pictures and attributes. Use the up and down arrow keys to display the other four screens, each showing four other players. Examine all available players before forming your Party, keeping in mind each player’s attributes and how they will enhance the team. (Refer to the Party Formation and Scavenger Attributes section of the Scavengers Briefing Report manual.)

One of the displayed characters will be selected, indicated by a red box around the player picture and attributes. Use the right and left arrow keys to move the selection box right and left. To add a player to the Party, move the selection box over that player and press [Ins]. If you later change your mind, you can remove a player from the Party by using the [Del] key.

You will also have to select members for a new Party if all of the members die or leave the Party. All players added to the Party must, of course, be in the same ruin. (At the beginning of a new game, all 20 players are in the Lau ruin.) The ruin in which a player is located is indicated under his/her name, unless the player is already in the Party or is dead. You may not add dead players to the Party. When more than one player joins a new Party, the members rendezvous at a central location within the ruin.

The Party may consist of one to four players; four are recommended for maximum safety. Note that the Party members move together as a unit and are represented on the playing screen by a single icon, except during combat.

When you have completed your Party selection, press [Return] to begin or resume your game.

The Map Display

When the game begins, the Map Display screen will appear. A sample Map Display screen is shown in Figure 1.
This screen is divided into several areas, as follows:

1. Up to four players will be displayed at the four corners of the screen. These are the members of the current Exploration Party. Each player display is divided into two areas, a player picture and an attributes area.

   a. There are twelve player attributes, but only six of them will be displayed for a player at a time. Use the Attributes command to toggle between the displays (see Table II).

   b. The player picture may be modified by using the Modify command from the Main Menu. The player's name will be displayed under the picture (also changeable via Modify), and the player's number (in the Party) will be displayed in the upper-left corner of the picture. You will need to use this number when issuing commands.

   **NOTE:** SCAVENGERS uses a random-name algorithm to generate the players' names. Should you find any of these names objectionable, use the Modify command to change it.

2. A terrain map will appear in the top center portion of the screen. Only a small amount of the overall map can be displayed at a time. The Party is always in the center of this map, and the map will scroll as the Party moves. Some terrain features, such as walls and trees, may block the Party's view of portions of the map. These areas will appear dark blue on the terrain map.
3. The command input and message area will occupy the bottom center of the screen. When a command needs to be typed in, a prompt (>) will appear at the bottom left corner of this area. Messages also appear in this area. As you type in commands and messages appear, the area scrolls upwards.

**NOTE:** If the game types out more lines of messages than can fit in this area, it will pause, change the entire area to reverse video (blue on yellow), and beep (if sound is enabled) to allow you to read the messages before they scroll out of view. Press the [Tab] key to continue the game.

**Entering Commands**

SCAVENGERS recognizes a number of one-word commands as well as the function and numeric keypad keys. All commands can be entered as a sequence of two characters, which are capitalized in the command list below; SCAVENGERS will complete the command for you. For example, to use the Arm command, press [A] then [R]. If you type the command from the keyboard, you must "confirm" it before it will be executed by pressing the [Space] bar or [Return] key. You can backspace to fix a typing error before confirming a command, or press [Esc] to cancel it. If you use the function or keypad keys to enter a command, it will be executed immediately; no confirmation is required.

**NOTE:** In general, most commands and activities can be cancelled by pressing the [Esc] key.

**Alphabetical Command List**

The following is an alphabetical list of the game play commands, each with its two-character keystroke abbreviation capitalized. The corresponding function key or numeric keypad key for each command is also given.

Table II lists the function keys and corresponding commands, shown with their two-character keystroke abbreviations capitalized. Figure 2 shows the numeric keypad commands.
ARm: Arm a player [F1]

You will be prompted for the number of the player to be armed. You will then be shown a list of that player's available weapons and asked to enter a selection (by number). Note that it is possible to arm a player with a weapon for which he or she has no ammunition.

ATtributes: Display a player's attributes [Shift][F9]

There are two attribute displays. One shows the player's remaining Hit Points (HP), RAD points (RP), armor being worn, weapon in hand, remaining carrying capacity (Wt.), and mount being ridden, if any. The other display shows the player's strength, wisdom, intelligence, charisma, observation, and dexterity ratings. This command toggles between the two displays for the player you specify (1-4), or for the entire Party if you enter 0.

BOard: Board a vehicle [Ctrl][F1]

The entire Party will board the vehicle that is in the same map square as they are. If there is more than one vehicle in that space, you will be prompted to select which vehicle (by number). See also Dismount.

BUild: Build a vehicle [Shift][F3]

When you have accumulated all of the parts and a blueprint for a vehicle, you may attempt to build it. The game will prompt for the number of the player who will attempt the actual construction, and for the number of the player who will supervise the construction. See also Take-Apart.

CAmp: Camp for awhile [F10]

This command allows players to rest up from a particularly nasty battle to regain hit points. Food will be consumed, and monsters will still roam about, however. You will be prompted for the duration of the rest period, in minutes.

CEnsus: Take a census of a ruin [Shift][F8]

To find out which players are in a ruin, enter the ruin and issue this command. The leader of the Party will make a secret rallying cry, and all Lau natives nearby will let their presence be known.
DAte: Display game date and time  [Ctrl][F3]

Displays the game date and time, in military time. Note that it does get dark at night, limiting the Party’s visibility.

Distribute-Food: Divide the Party’s food  [F8]

All the food carried by the Party will be pooled, then each Party member will draw his or her fair share.

Dismount: Dismount a vehicle or mount  [F4]

If the entire Party is riding in a vehicle, they will all dismount the vehicle. Otherwise, you will be prompted for the number of the Party member who will dismount his or her mount. See also Mount and Board.

DON: Don armor  [F2]

You will be prompted for the number of the player who will don armor. If the player has only one type of armor, it will be automatically selected. Otherwise, you will be shown a list of the available armor and asked to enter a selection (by number).

DROP: Drop an object  [Del]

You will be prompted for the number of the player who will drop something. A list of the player’s possessions will be displayed, and you will be prompted to make a selection (by number). If the player has more than one of the selected object, you will be prompted for the quantity to be dropped. See also Grab.

EAST: Move East  (6 on numeric keypad)

The entire Party will move East one map square, if possible.

GO-in/GO-out: Enter or exit a ruin  [F9]  (or 5 on numeric keypad)

To enter a ruin, move the Party to the ruin on the map and issue this command. To exit a ruin, move the Party to the tunnel opening in the ruin and issue the command. When the Party enters Lau, the Guard at Lau’s storeroom will stop the Party and ask if anyone wants to visit the storerooms.
GRab: Grab an object  [F5]

You will be prompted for the number of the player who will do the grabbing. If there is more than one object on the ground, you will be prompted to select which object is to be grabbed (by number). If there are multiple objects of the same type, such as food, you will be prompted for the amount to be grabbed. See also Grab-All and Drop.

Grab-All: Grab all of the objects of one type  [Ins]

This command performs the same function as Grab, except that you will not be prompted for the amount to grab. See also Drop.

HAnd: Hand an object from one player to another  [F6]

You will be prompted for the number of the player doing the handing and the number of the player the object is to be handed to. You will then be presented with a list of the first player's objects and asked to make a selection (by number). If the first player has more than one of the selected object, you will be prompted for the quantity to be handed.

IIdentify: Identify an object on the ground or a player  [Shift][F7]

The most observant and wise Party member will examine an object on the ground underneath the Party and attempt to determine its identity. If the object is a Lauan who is not in the Party, that player's identity card will be displayed.

IINventory: Take inventory of a player's possessions  [Shift][F5]

You will be prompted for the number of the player who will take inventory.

JOin: Invite a player to join the Party  [Shift][F1]

If the Party has less than four members, you may invite other players that you encounter to join. If there is more than one player at this location who could join the Party, you will be prompted with a list of the player names and asked to make a selection (by number). See also Leave.
**KEYmap: Display a map of the function keys**  [Ctrl][F8]

This command will replace the screen display with a map of the commands available, organized by function keys, as shown in Table II. Press [Return] to return to the game display.

**LEave: A player leaves the Party**  [Shift][F2]

You will be prompted for the number of the player who will leave. You may not abandon players on the Main Map, as they will not have the protection (and food) offered in a ruin. If all the players leave the Party, you will be prompted to form a new Party. See also Join.

**LOGging: Turn hard-copy logging on or off**  [Ctrl][F9]

If logging is on, it will be turned off, and vice-versa. The log will be printed on the standard print device, usually LPT1. Virtually all commands and responses will be printed. Caution: Do not use this command if your system is not equipped with a printer!

**MAP: Display a map of explored territory**  [Ctrl][F2]

While on the surface, the Party continually makes a detailed map which will be taken back to Lau to aid future expeditions. This map can be consulted whenever the Party is not in a ruin. If all of the Party members die before returning the map to Lau, the knowledge they have gained is lost. Once the Party returns to Lau, however, copies of the map are made and can be used by future Parties.

**MOUNT: Mount a riding mount**  [F3]

You will be prompted for the number of the player who will mount. Note that players must catch their mounts (using Grab) before they can mount them. If the selected player has more than one mount, you will be prompted with a list to make a selection. See also Dismount.

**MUTations: Display the mutations suffered by a player**  [Shift][F10]

You will be prompted for the number of the player to display.
NOrth: Move North  (8 on numeric keypad)

The entire Party will move one map square North, if possible.

NorthEast: Move Northeast  (9 on numeric keypad)

The entire Party will move one map square Northeast, if possible.

NorthWest: Move Northwest  (7 on numeric keypad)

The entire Party will move one map square Northwest, if possible.

OPtions: Select or change game options  [Ctrl][F7]

Allows you to select or change the following game options:

[S]  Sound. Toggles the sound on and off. Normally, the sound is on unless you have used the “-s” option to start the game or turned it off from the Main Menu.

[J]  Jump Scroll. The game begins in “smooth scroll” mode, meaning that the terrain will scroll smoothly under the Party as it moves around. This makes it easier for kibitzers to follow your movements, but slows the game a little. Jump scroll moves a complete terrain square instantly.

[B]  Battle Modes. Toggles between “direct” and “relative” battle modes, described on p. 20. “Direct” mode is the default.

Both the scroll and battle mode options are remembered between game sessions.

Q uit: Quit the game  [Ctrl][F10]

Saves the current status of the Party and returns you to the Main Menu.

REad: Read a blueprint  [Shift][F6]

You will be prompted for the number of the player who will attempt to read the blueprint. If that player has more than one blueprint, you will be prompted to select which one (by number).
SOuth: Move South  (2 on numeric keypad)

The entire Party will move one map square South, if possible.

SouthEast: Move Southeast  (3 on numeric keypad)

The entire Party will move one map square Southeast, if possible.

SouthWest: Move Southwest  (1 on numeric keypad)

The entire Party will move one map square Southwest, if possible.

Take-Apart: Dismantle a vehicle  [Shift][F4]

The vehicle over which the Party is standing will be cannibalized for parts, which may be used to build other vehicles. See also Build.

USE: Use a tool  [F7]

You will be prompted for the number of the player who will use the tool and, if that player has more than one tool, to select a tool to use (by number).

WEst: Move West  (4 on numeric keypad)

The entire Party will move one map square West, if possible.
TABLE II
FUNCTION KEY COMMANDS

<table>
<thead>
<tr>
<th>FUNCTION KEY</th>
<th>COMMAND</th>
<th>[Shift]</th>
<th>[Ctrl]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[F1]</td>
<td>ARm</td>
<td>JOn</td>
<td>BOard</td>
</tr>
<tr>
<td>[F2]</td>
<td>DOn</td>
<td>LLeave</td>
<td>MAp</td>
</tr>
<tr>
<td>[F3]</td>
<td>MOunt</td>
<td>BUIld</td>
<td>DAte</td>
</tr>
<tr>
<td>[F4]</td>
<td>Dismount</td>
<td>Take Apart</td>
<td></td>
</tr>
<tr>
<td>[F5]</td>
<td>GRab</td>
<td>INVentory</td>
<td></td>
</tr>
<tr>
<td>[F6]</td>
<td>HAnd</td>
<td>REad</td>
<td></td>
</tr>
<tr>
<td>[F7]</td>
<td>USe</td>
<td>IDentify</td>
<td>OPltions</td>
</tr>
<tr>
<td>[F8]</td>
<td>Distribute Food</td>
<td>CEnsus</td>
<td>KEymap</td>
</tr>
<tr>
<td>[F9]</td>
<td>GO in</td>
<td>ATrIBUTES</td>
<td>LOGging</td>
</tr>
<tr>
<td>[F10]</td>
<td>CAMp</td>
<td>MUtations</td>
<td>QUt</td>
</tr>
</tbody>
</table>

Figure 2. Numeric Keypad Commands
Battle Mode

From time to time the Party will be attacked by wandering monsters. When a monster is encountered, you will be shown a picture of the type of creature attacking. Then the display will zoom in on the Party so that the individual player(s) and monster(s) can be seen. Each Party member will appear facing in the direction the Party was moving. To make identification of individual members easier, the player number (1-4) will appear on the player’s helmet.

During battle mode, the monsters and players move or fight in sequence, but not always in the same sequence, depending on their abilities. When it is a Party member’s turn to do something, the number on his or her helmet will be highlighted and the player's name will appear in the message area.

Party members always fight in the direction they are facing. To fight a monster, a player armed with a hand weapon (sword, knife, etc.) must be on the map square adjacent to the monster. If the player has a missile-firing weapon (.45 pistol, sling, etc.), the monster only needs to be in a direct line of fire. If the player runs out of ammunition during the battle, he or she must use the Re-arm command to select a new weapon.

Players may choose to defend themselves from a monster’s attack, using the Parry command. Individual players or the entire Party may also attempt to flee from the attack by moving out of the battle zone. Once a player has moved out of the battle area, he/she cannot return. If the entire Party leaves the area, combat is terminated, and the Party attempts to flee from the attackers. This may or may not be successful. When the Party is in a confined area, such as on board a ship, it may not be possible to move out of the battle area.

Command entry during battle mode is quite different. Single keys on the keyboard or keypad control the Party members’ actions, depending on the currently selected battle mode. There are two battle modes, direct and relative, which may be selected using the Options command.
**Direct Battle Mode.** The default mode is "direct" battle. In this mode the Party members move or turn directly according to the keypad keys used. For example, if a Party member is facing West and you press the up arrow (North), that member will turn to face North. If the Party member is already facing that direction, the member will move forward one square, if possible. If you press the key opposite to the direction the player is facing, the player will step back one square, if possible. For example, if the player is facing East and you press the left arrow key (4), the player will step backward to the West. Figure 3 shows the keyboard and keypad configurations, and each key's corresponding direct battle mode command.

![Keyboard and Keypad Configurations](image)

**Figure 3. Direct Battle Mode Key Commands**

**Keyboard Keys**
- Q: Face NW
- W: Face North
- E: Face NE
- R: Rearm Player
- A: Face West
- S: Turn Around
- D: Face East
- F: Fight Monster
- Z: Face SW
- X: Face South
- C: Face SE
- SPACE (or [P]): Parry

**Numeric Keypad Keys**
- 1: Face SW
- 2: Face South
- 3: Face SE
- 4: Face West
- 5: Turn Around
- 6: Face East
- 7: Face NW
- 8: Face North
- 9: Face NE
- 0: Fight
- .: Parry
Relative Battle Mode. In "relative" battle mode, the keypad keys turn the Party members in relation to the direction they are currently facing. For example, if a player is facing West and the Turn Right 90° command is given, the player will turn to face North. Similarly, the Move Forward command will move the Party member in the direction he/she is facing. Figure 4 shows the keyboard and keypad command keys active in relative battle mode.

![Relative Battle Mode Key Commands Diagram](image)

**Figure 4. Relative Battle Mode Key Commands**
Visiting Lau’s Storerooms

Whenever the Party enters Lau, the guard at the tunnel entrance will ask if the Party members want to visit Lau’s storeroom, either to leave scavenged articles or to retrieve articles left there by previous expeditions. For security reasons, only one Party member at a time may enter the storeroom.

When a Party member enters the storeroom, a visual display of the player’s pack contents and the current contents of the storeroom will appear on the screen, side by side. Under each item will be the quantity available. One of the quantity values will be highlighted (blue on yellow) to indicate that it is currently selected. Use the keypad or keyboard keys, shown in Figure 5, to perform the transaction.

The left, right, up, and down movement keys “wrap” at the edges of the display, so you can easily move from the “pack” side to the “storeroom” side to select items from either area. As you move the highlighted area to different items, the item’s description will be printed along the bottom of the display.

![Keyboard Keys and Numeric Keypad Keys](image)

Figure 5. Storeroom Management Key Commands
To transfer items from the player's pack to the storeroom, or vice-versa, select the item to be moved using the movement keys, then use one of the "hand" keys to hand it from the Party member to the guard or from guard to Party member. If there is only one of the selected item (i.e., one knife), it makes no difference whether the "some" or "all" key is used. If there is more than one (food units, for example), using the "hand all" key will transfer the entire quantity to the other side. To transfer only some of the items, use the "hand some" key and enter the number to be handed.

If the player is wearing armor or wielding a weapon, those items will be highlighted in red in the player's pack to caution you against giving away all of that type of item. For example, giving away all of the player's knives when that player was armed with a knife will disarm that player.

There may be multiple "pages" of items, especially in the storeroom. To see other pages, move the selection cursor to the desired side, then use the "move back one page" or "move forward one page" keys. Paging only affects the side of the display (pack or storeroom) where the selection cursor is located.

While browsing in the storeroom, all selections are tentative (you will note that the player's attributes display does not change). However, the player cannot grab more items than he/she could normally carry.

When you are through moving items around, press [Return] to confirm the transaction or [Esc] to cancel it.

If there is more than one player in the Party, the players may enter the storeroom in any order (or not at all), or may enter several times. When all transactions have been completed, the Party will emerge from the tunnel into Lau.

**BACKING UP THE WORLD**

You may want to make a backup of your progress in the game from time to time to guard against accidental destruction due to power failure or severe monster attacks. To do this, you must quit the game and exit to DOS. SCAVENGERS keeps all of the game information in a single file, SCAVENGE.DAT, on the World Disk. To make a backup, all you need to do is make a copy of this file.
Backing Up a Floppy Disk Game

If you are playing SCAVENGERS from a floppy disk, insert the World Disk in drive A, a diskette with at least 100K bytes of free space in drive B, and issue the following command:

```
COPY A:SCAVENGE.DAT B:SCAVENGE.SAV
```

If you only have one disk drive, you can still issue the command. Just follow the instructions displayed on the screen by the COPY command.

Backing Up a Hard Disk Game

If you are playing SCAVENGERS from a hard disk, simply copy SCAVENGE.DAT to a file with another name:

```
COPY SCAVENGE.DAT SCAVENGE.SAV
```

Restoring a Game from a Backup

To restore a game from a backup, just copy the backup file over the SCAVENGE.DAT file and resume playing:

```
COPY SCAVENGE.SAV SCAVENGE.DAT
```

Saving and Restoring Player Pictures

Player pictures are stored in a file named PLAYERS.PIC on the World Disk. If you modify the player pictures, you may want to save a copy of the picture file so you can use it in subsequent games. Follow the instructions outlined above, substituting the file name PLAYERS.PIC for SCAVENGE.DAT in the commands (using a different name for the backup file). Note: Players’ names and other attributes are not contained in the PLAYERS.PIC file.

TANDY KEYPAD SUPPORT

The Tandy® computer keyboards have a separate cursor array and numeric keypad. In “normal” mode, the numeric keypad keys generate the special characters backslash [\], tilde [~], vertical bar [|], and back quote [¨] instead of cursor-positioning codes. SCAVENGERS has been designed to interpret these codes so that the keypad appears identical to the IBM version. In addition, the keypad [0] and [.] keys are interpreted as [Ins] and [Del].

SCAVENGERS OF THE MUTANT WORLD 25
**FINAL WORD**

*Interstel* has gone to great strides to ensure the software product you purchased is as error free as possible. However, due to the extreme diversity and complexity of the game, it is not possible to test every conceivable situation. If a bona-fide error is found, *Interstel* is not under obligation to notify any persons or organization; nor is *Interstel* required to release an updated version of this program, but may choose to do so. If you think you have found a program error, we ask that you write and tell us about it. Give as much information as possible, i.e., what happened, what computer you are using, the command you were executing, what you were trying to do, etc. If the game hangs while creating a world, please record the World Number shown at the bottom of the screen. Send us a printout of the screen if possible. **DO NOT SEND US YOUR DISK(S).** Please enclose a self-addressed stamped envelope. After receiving your letter we will look at the problem and send a reply.

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Gary Poole, Harold Price  
Gary Robinson, Trevor Sorensen

Project Manager: Robert Jones, Jr.
AUTHORS' NOTES

SCAVENGERS is based on an as-yet unpublished board game of the same name by Richard Launius. Work on the computer game began in the summer of 1986 when Chris and Bruce agreed to convert the game for computer play. Adapting the game to the computer necessitated many changes, and the game has evolved significantly over the last two years. However, the challenge, spirit of adventure, and excitement of the original board game have been kept.

The game is written mostly in Microsoft C (33,000 lines), with some assembly language code (10,000 lines) in areas where speed is of the essence. A home-grown overlay manager sequences the game through its six overlays, a total of 470K of code and data. We figure we spent somewhere between 1,500 and 2,000 hours coding and testing.

The most time-consuming part of the game's development was digitizing the artwork. The game contains four full-screen pictures, twenty player pictures, more than 30 monster pictures, and over 100 icons representing terrain features and other objects. Each of the nearly 600,000 pixels was laboriously colored by hand (well, by mouse, anyway).

While Bruce labored over the graphics and sound effects, Chris wrote most of the game-playing code in brief flurries of concentrated effort. Steve Wahl, a professional animator, provided us with original artwork for the monsters, and Chris' ex-wife Clare helped with some of the digitization. Chris composed the original music. Special thanks go to Harold Price, our first-line-of-defense playtester, who has always managed to break our bullet-proof code in less than 30 seconds.

The game development process wasn't always a complete drudge. We introduced some interesting bugs from time to time, and learned something about the operating system as we went. For example, at one point food rations wouldn't sit still and often chased the Party across the screen. Later on, the game took a cannibalistic turn when idle players became grabable objects and turned into food when picked up by a Party member. We also discovered it isn't a good idea to play interrupt-driven music during disk I/O--it messes up the in-memory FAT tables, trashing the disk.

Would we do it again? Sure! Well...maybe.

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Tandy is a registered trademark of Tandy, Inc.
AUTHORS’ BIOGRAPHIES

Richard Launius was born in the midwest and raised in South Carolina. As a teen, he befriended Trevor Sorensen, now President of Interstel. Together they spent most of their time playing board games, and gaming became Richard’s favorite hobby. After high school, he attended Graceland College, where he played varsity hockey and earned a degree in Fine Arts. Upon graduation, he began a career in Yellow Page publication, managing art departments and administering a regional division. He will soon assume responsibility for all computer graphics within his company.

Richard and his wife Carolyn have three children which take a lot of their spare time, but Richard still finds time to do what he does best – design. He has published several role-playing and board games, as well as providing artwork and creative writing for Interstel products. His original concept of Scavengers was as an adventure boardgame, which is the type of game Richard likes best. That, combined with the wizardry of Bruce and Chris, produced a computer version that brought the adventure to life and remained true to the original design.

Bruce Beaumont was born in Virginia sometime before 1950, and he began working in data processing back in the days of plugboards, punched cards, and coal-fired computers. After a successful college career at Indiana University (the one in Pennsylvania) and Pitt, he took a short vacation from computers in Viet Nam. A veteran of 38 moves (the curse of being an Army brat), Bruce now lives in Redondo Beach and works in the aerospace industry.

He wrote the map generator and most of graphics and sound, fine tuned the game, and is one of the few people on the planet who can make sense of Chris’ code. In his spare time, Bruce bowls, plays board games, and tries to keep Chris working on Scavengers.

Chris Stassen claims to have been born in Canada sometime in 1962, after which he promptly moved to Ohio. His friends know better. He was actually hatched on some alien world, because he thrives on a diet of beef jerky, frozen peppermint patties, and jelly beans, and he is the luckiest humanoid life-form alive. He also has prehensile toes. After graduating from CalTech in 1984, Chris moved to Redondo Beach where he is presently working for what’s left of the aerospace industry.

Chris provided just about all of Scavengers’ game logic. In his spare time, he goes for the three B’s: Bowling, Bridge, and Ice Hockey (which begins with a "B" in his native tongue), and plays piano and bass guitar.

SCAVENGERS OF THE MUTANT WORLD 29
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INDEX

A
ammunition 13, 20
arm 13, 19
armor 13, 14, 24
attacks by monsters 1, 20
attributes 10, 11, 13, 19

B
backup disks 2 – 3
backup files 24 – 25
battle 20 – 22
battle mode 17, 20 – 22 (see also direct and relative)
blueprints 1, 13, 17
board 13, 14, 19
briefing report 1, 4, 10
build 13, 18, 19

C
camp 13, 19
capacity, weight 13
census 13, 19
characters 7 – 8, 10, 25
   editing 5, 7 – 8
charisma 13
city (see ruins)
combat 10, 20
command entry 12
commands, character editing 9
   direct battle mode 21
   function key 19
   numeric keypad 19
   relative battle mode 22
   storeroom management 23
construction (see build)
copying disks 2 – 3
creating new world disks 5, 6

D
date 14, 19
dead players 10
dexterity 13
direct battle mode 17, 20 – 21
dismount 14, 16, 19
distribute food 14, 19
don 14, 19
drop 14, 15, 19

E
east 14, 19, 21
exit 5

F
exiting a ruin (see Go out)
face [direction] 21
fight 20 – 22
food 13 – 16, 24
function key commands 19

G
go in or out 14, 19
grab 14, 15, 16, 19
grab all 15, 19

H
hand 15, 19
hand all 23 – 24
hand some 23 – 24
hard disk 2 – 3, 6, 25
hit points 13

I
identify 15, 19
identity card 15
installation on hard disk 3
intelligence 13
inventory 15, 19

J
join 15, 16, 19
jump scroll 17

K
keymap 16, 19

L
leave 10, 15, 16, 19
logging 16, 19

M
main menu 3 – 7, 10 – 11, 17
map 16, 19
map display 7, 10 – 12
memory requirements 2, 4
message area 12, 20
messages 12
modify 5, 7, 11
modifying a character 5, 7 – 9
monsters 1, 13, 20
mount 13 – 14, 16, 19
movement 1, 11, 19, 20 – 22, 23

31

SCAVENGERS
mutations 16, 19

N
names, character 5, 8, 10–11, 25
night 14
north 17, 19, 21
northeast 17, 19, 21
northwest 17, 19, 21

O
observation 13
options 3, 17, 19, 20

P
pack 23–24
parry 20–22
parts 13, 18
party formation 10
party members 1, 10–11, 13, 20
path 3
pictures, player 5, 7–8, 10, 11, 25
playing the game 3, 5, 10
printer 16

Q
quit 17, 19
quit editing session 8

R
rad points 13
RAM disk 2
read 17, 19
rearm 20–22
rest 13
restore a game 25
riding mount 14, 16
ruins 1, 10, 13–14, 16

S
save editing changes 7, 8, 25
save game 17, 24–25
scrolling 11, 17
security system 4
silent mode 3
smooth scroll 17
sound 3–5, 12, 17
south 18, 19, 21
southeast 18, 19, 21
southwest 18, 19, 21
specify world disk path 5–6
starting the game 3
step back 22
storerooms 14, 23–24
strength 13
swap pictures 8

T
take apart 13, 18, 19
tandy keypad 25
terrain 1, 11, 17
time 1, 14
tools 18
tunnels 14, 23–24
turn around 21–22
turn [direction] 21–22

U
use 18, 19

V
vehicles 13–14, 18
visibility 14

W
walls 11
weapons 12, 13, 20, 24
west 18, 19, 21
wisdom 13
world disk template 2, 3, 5–6, 7, 10, 24–25
world disk path 3, 5–6, 10