

OVERVIEW

Boulder Dash™ Construction Kit consists of two programs. With the Construction Kit you can create your own Boulder Dash screens. With Boulder Dash IV the game you can enjoy a new set of challenging screens which we have made for you or use it to play the screens you create with the Construction Kit.

LOADING

ATARI: Disk-remove all cartridges. Computer should be off. Turn on the disk drive. When the busy light goes out insert the disk with the label side up. Close the drive door. Turn on the computer. The program will load and run automatically. Wait until the title screen is displayed then follow the screen instructions.

NOTE: XL/XE Owners should hold down the Option key while turning on the computer.

COMMODORE 64/128: Disk-turn on your computer and disk drive. Insert the disk with the label side up. Close the drive door. Type LOAD "****.8,1 then press the Return key. The program will load and run automatically. Wait until the title screen is displayed then follow the screen instructions.

SCREEN INSTRUCTIONS

Press 1 to run the Construction Kit
Press 2 to run the Game.

ATARI: Cassette-One side of the cassette contains the Construction Kit. The other side contains the Game. Select the side you want to run. Remove all cartridges. Computer should be off. Place tape into the cassette recorder. Press Rewind to make sure the tape is completely rewound. Press Play on the recorder. While holding down the Start key turn on the computer. After a

signal (beep) press Return on the computer. The tape will start to turn and load the program. After several minutes the program will run automatically.

NOTE: XL/XE Owners should hold down both the Option and Start keys while turning on the computer.

COMMODORE 64/128: Cassette-One side of the tape contains the Construction Kit. The other side contains the Game. Select the side you want to run. Remove all cartridges. Computer should be off. Place the tape in the cassette recorder. Hold down the Shift and Run Stop keys while turning on the computer. The program will load and run automatically.

SPECIAL REQUIREMENTS

One or two joysticks.

CONSTRUCTION KIT

A-OVERVIEW

Design and create your own Boulder Dash caves and intermissions. You have total control to place any item, boulders, diamonds, walls, etc. You can also set your timers, number of diamonds to win, bonuses, everything. You can test your screen while you are creating it and correct it, if necessary, right on the spot. You can also make complete games using up to 64 screens. You can mix your caves and intermissions in any order you want, and then play them with Boulder Dash IV The Game.

You can have as many games on one single diskette or tape as the disk or tape space allows. (One diskette can hold up to 10 different games with 20 screens each. A total of 200 caves and intermissions).

And best of all, it is easy to use. For most operations you only have to choose an item from the palette by placing the cursor over your selection and pressing the trigger. The program even provides disk commands for file maintenance that allows you to

copy and delete files, see your directory, format diskettes, etc.

To make a complete game follow these simple steps:

- Decide whether you want to design a Cave or an Intermission.
- Place your boulders, diamonds, exit doors, etc.
- Set the timers and counters.
- Save and Test your Caves.
- Make a Game sequence with your caves.

WARNING

DON NOT SAVE YOUR SCREENS ONTO THE BOULDER DASH CONSTRUCTION KIT TAPE OR DISKETTE OTHERWISE YOU WILL DESTROY THE PROGRAM.

B-THE PALETTE

The Palette is functionally divided into two groups: The brushes and the commands. Most of the commands can also be called with a single keystroke as indicated below.

KEY	Functions	X= ICON	FUNCTION	KEY
BRUSHES				
	Boulder	X	X	Diamond
	Enchanted wall	X	X	Wall
	Titanium wall	X	X	Growing wall
	Extra Rockford	X	X	Dirt
	Firefly	X	X	Butterfly
	Amoeba	X	X	Slime
	Hidden Exit door	X	X	Regular Exit door
	Entry door	X	X	Line mode
				L
FUNCTIONS				
C	Random	X	X	Eraser
	Change Colors	X	X	Test Screen
M	Main Menu	X	X	New Screen
P	Remove Palette	X	X	Timers & Counters
F	Full Screen			
S	Turn sound on/off			
↑	Exit Function			

SPECIAL KEYS

ATARI ONLY: ESC — Exit any function.

C-THE BRUSHES

Select any brush by placing the cursor over the icon and pressing the trigger. Now you can move your cursor to anywhere on the screen and "paint" with it by pressing the trigger again. You will always paint on the working screen which is one quarter of the total area for a cave. To view the full screen (cave) press the F key. (see Full Screen below).

BOULDER The rocks will fall if unsupported, topple off wall edges, and can be pushed one at a time if there are no objects of any kind in front of it.

DIAMONDS In every cave a certain number of collected diamonds are always needed to win, and in the case of hidden exits reveal the exit door. However, you can have screens which start without diamonds if you provide the means to create them. (See Butterflies and enchanted walls, below).

ENCHANTED WALL Looks like any other wall, however, when hit by a falling object, it mills for a certain amount of time (see timers). During this period of time it will turn boulders into diamonds and diamonds into boulders. They must hit the wall when falling and the area below the wall must be empty.

WALL A regular wall is used to build spaces and paths. It can't be crossed, but it can be destroyed by explosions.

TITANIUM WALL This wall is indestructible and boulders don't fall off their edges.

GROWING WALL If there are no obstacles to the right or left of this wall, it will grow closing spaces. Please note that you have to place dirt or some moveable object initially to prevent the wall from growing immediately.

EXTRA ROCKFORD When you place an extra Rockford(s) in the screen, he (they) won't move, but you must protect him (them) from being destroyed by boulders, fireflies or butterflies.

DIRT Used as a filler. Also as a support of rocks and diamonds. Fireflies and butterflies can't go through it. Rockford can dig dirt by walking through, or by first pressing the trigger and, while holding it down, pushing the stick in the desired direction.

FIREFLIES They explode on contact, killing Rockford. You can destroy them by dropping boulders on them. If they make contact with the Amoeba they will explode as well. They always fly in a predictable direction.

BUTTERFLIES They behave very much like the Fireflies except that they fly in the opposite direction and produce diamonds when they explode. Try dropping a boulder on them.

AMOEBAS A green blob (as indicated on the palette) that grows through dirt. If surrounded by boulders or walls, it will suffocate and turn into diamonds. However, if it grows too much (200 units) it will turn into boulders. The speed of growth can be controlled with the timers.

SLIME Looks like the Amoeba, but it acts more like a permeable wall, that lets the boulders and diamonds fall through the Slime at various rates which you can control with the timer. On the palette it is represented as a blue blob.

HIDDEN EXIT DOOR This door looks just like a titanium wall and obviously is difficult to find when you try to exit.

EXIT DOOR This exit will be revealed as soon as the required number of diamonds is completed, by flashing on and off.

ENTRANCE This is the place where Rockford will appear at the beginning of every cave.

D-THE COMMANDS

LINE You can make rows of objects with the current brush by selecting the Line icon or pressing the L key on the keyboard. To make a line you press the trigger on one point of the screen, move the cursor to the end point and press the trigger again.

RANDOM Selecting the dice icon will place on the screen 20 objects with the current "brush."

COLOR Select the Color icon or press the C key. A color menu

will be displayed. Move the joy stick until you get the desired color. Then press the trigger to select another color register.

TEST Press the T key or select the test icon on the palette. You can now play the current screen just like a real game. Make sure you have at least one entrance and one exit. You can return to the edit mode at any time by pressing the Run/stop key if you have the Commodore version. Atari owners should press the escape key.

MENU Pressing the M key or selecting this icon will display the file menu. Move the joy stick in any direction to select the desired function and then press the trigger. You can LOAD and SAVE your screens. You can make GAME sequences and perform file maintenance (see Making a Game for more detailed information).

NEW SCREEN Press the N key or select this icon to completely clear the screen and start creating a new one. The program will ask you to reconfirm your selection. Then a menu will ask you if you want to create a cave, an intermission or to load one screen from tape or disk for editing or testing.

PALETTE With the P key or icon you can temporarily remove the palette in order to work under it. You can restore the palette by pressing the UP ARROW. CAREFUL! (Don't confuse this arrow with the cursor keys).

TIMERS The Y key or the clock icon will display a menu to control the values of the timers and counters for the cave. You can control items like: the speed of the game, the time limit of the cave (in seconds), the time for enchanted walls and amoebas, etc. To change the values move the stick right/left. If you want to go fast, move the stick up/down. When your value is displayed, press the trigger to go to the next item.

FULL SCREEN Press the F key to view all four screens of a cave. This screen, you can reposition the working screen window (large cursor). Press F again or the joystick trigger to come back to the single working screen.

SAVE GAME It will save the current game sequence onto disk. You have to provide a unique name for your game sequence.

DISK OPTIONS

These Disk Options are not essential for you to make Boulder Dash games and screens, but are provided for your convenience. Catalog: Selecting this option will list All the files in the current disk, one at a time.

Format: Allows you to format a disk without having to exit the Construction Kit.

Delete: You can erase Any file from the current disk, permanently. You have to provide the file name exactly, with extensions, if any.

Rename: This option allows you to change the name of the file. You have to be careful to add the proper extension: .INT for intermissions: .CAV for caves: and .GAM for game sequence files.

Copy: With this option you can copy Any file to another disk.

K-TIPS & HINTS

1. Using the wrap-around feature of the cursor you can save time when having to move the cursor from end to end. If the cursor goes off the screen on one end it will appear on the opposite one.

2. To make interesting screens it is more important to base the idea of a cave around solving a problem than just collecting lots of diamonds.

3. The time limit for the cave is an important element. For example, the player may find he never has enough time to finish the cave. Suddenly, if he solves a certain puzzle, he finds he now has plenty of time.

4. Design puzzles where he has plenty of time but he is always one diamond short. If the player tries different approaches he will find the missing diamond.

5. Caves that have many ways to solve are enjoyable because they are addictive, the player will want to play it over and over again because every time he tries something new he gets a

better time or more diamonds.

6. Avoid frustration. Don't overwhelm the player. Make him believe he was so close, that next time he will do it.

5. Select SAVE screen on the MENU.

6. Repeat steps 2 to 5 until you have selected all the caves for your game.

NOTE 1: When loading a cave from tape if you don't provide a file name, the program will load the next screen it finds in the tape regardless if it is a cave or an intermission.

NOTE 2: If you provide a name but the tape counter is already past the file, this will not be a problem. You may rewind the tape at any time and when the program finds the file, it will be loaded.

NOTE 3: If the file name is wrong, the program will continue searching indefinitely. You can escape by pressing the RUN/STOP key if you have the Commodore version. Atari owners should press the ESC key. If this doesn't work, press the Restore key. This will place you at the beginning of the Construction Kit.

LOADING SAVING CAVES TO TAPE

When loading a cave the computer will always generate a SINGLE BEEP as a prompt to indicate that you should place the tape and press Play in the recorder. Then press any key to initiate the loading. When saving a cave the computer will always generate Two Beeps as a prompt to indicate that you should place the tape in the recorder and press Play and Rec buttons in the recorder. Then press any key to initiate the saving.

WARNING: Since you can have many caves in one single tape, make sure you don't overwrite previous saved caves on the tape.

When loading you can rewind the tape anywhere before the cave that you want to load. Just make sure it is not too far otherwise it will take a long time to find it.

When saving be sure the tape is positioned After the last cave saved in your tape. You can keep a counter record of all your caves but it isn't always reliable.

standard game has 16 caves and 4 intermissions. A cave is about 4 TV screens in size. An intermission is only one TV screen in size. The purpose of the intermission is to reward the player who successfully completes 4 caves in a row with a fast (about 20 seconds) puzzle. A player can reap the bonus but will not lose a Rockford in case he/she is not successful. However with the CONSTRUCTION KIT you are free to have the number of caves and/or intermissions you desire.

F-SAVING A CAVE

The first step in making a game sequence is to save all your screens (caves and intermissions) after you've tested them. Follow the steps below:

— Call the MENU icon or press the M key.

— Use the joystick to select Save.

— Decide if you want to save onto DISK or TAPE.

— Type in a unique file name for your cave, or intermission, and press RETURN. You don't have to give any extension. The program will do it automatically for you.

NOTE:When you are saving a cave or an intermission you must provide a NEW name that doesn't already exist on the disk. If you want to use an existing name, then you must delete the old file first then save your current file. (Use the Disk Options explained below).

G-CREATING A SEQUENCE (DISK)

After you have saved all your screens to disk. Select the word GAMES from the MENU. You are then presented with 5 game options:

NEW GAME It will erase the current game sequence memory.

GAME FILES It will read the catalog of caves and intermissions from the current disk.

LOAD GAME It will load a previously created game sequence. You have to provide the name of the desired game sequence. (Don't confuse load game with load screen).

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