Pit Blocks 3D

Game Guide/Walkthrough
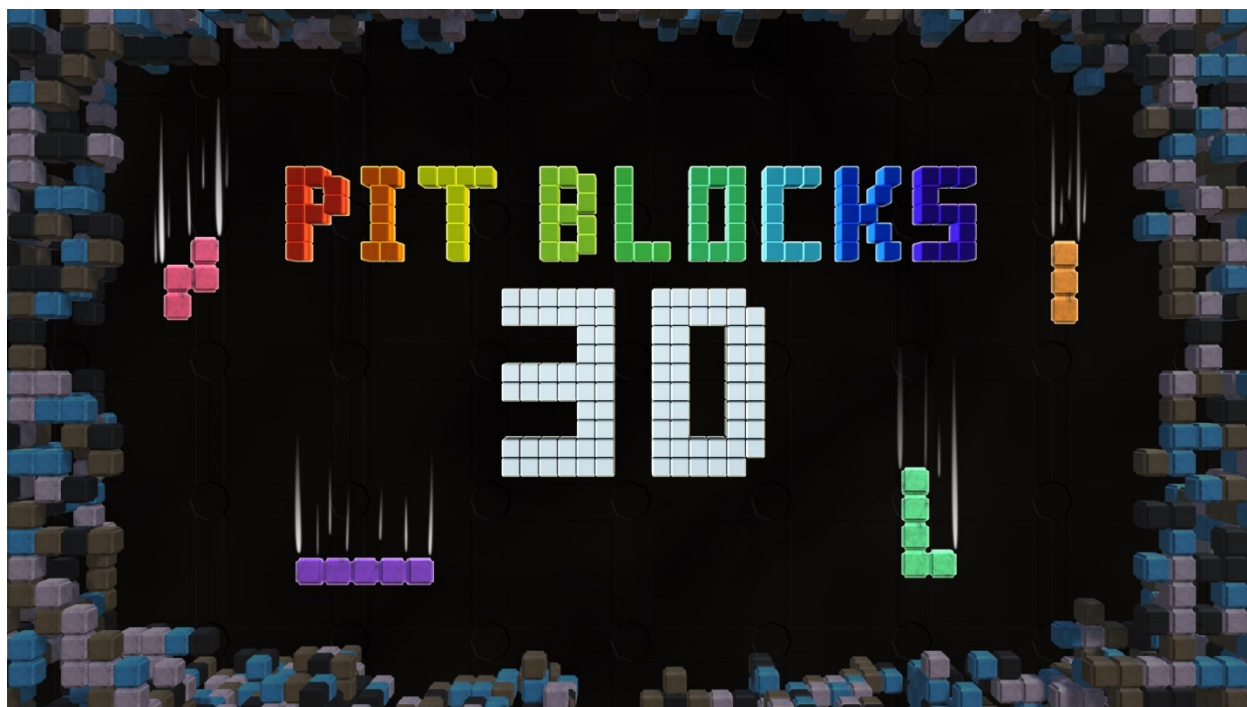
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Introduction

Summary

Pit Blocks 3D is a cube matching arcade style puzzle game where the player manipulates falling bricks of different shapes and sizes. The goal is to stay alive while the speed of the bricks increases over time and to rack up as many points as possible before the pit fills up with bricks. It's a true race against time!

Key Points

- Three different game modes including basic, advanced and expert, each defining a different brick size.
- Custom pit size can range from 3x3x3 to 18x18x18. For more fun you can set the pit size to random.
- Infinite level gain, allowing you to level up to infinity and beyond, piling up a large score number.
- Enjoy beautiful environments with their own unique stories.
- Jam to a large selection of soundtrack themes including Retro, Heavy Metal, and Piano!
- Earn more than 20,400 achievements! Good luck!

Note

WARNING! This guide/walkthrough contains <u>SPOILERS</u>. If you do not wish to have the contents of the game revealed to you, do not read the *Environments* section.

New Game

Game Mode
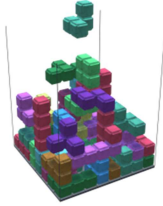
Pit Blocks 3D features three game modes including Basic, Advanced, and Expert. There is a 4th game mode option, *Random*, which randomly chooses any of the three available modes. The game modes simply select the size of the bricks during gameplay. Please refer to the table below for more detailed information.

Mode	Brick Size	Unique # of shapes
Basic	1 to 3	4
Advanced	4	8
Expert	5	27
Random	*Any of the above*	*Any of the above**

*Follows the # of unique shapes correlated to brick size

Pit Size
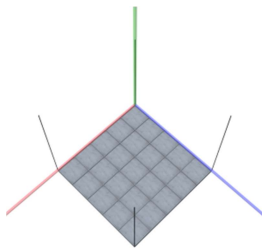
The pit size is the gameplay area. The pit consists of a width, a depth, and a height. The width and the depth make up the base of the pit, while the height completes the pit. The higher the pit, the more time the player has to position a brick to their liking. Size matters!

The game features a minimum and maximum size for a pit, depending on the Game Mode selected. The minimum is based on the number of bricks such that the longest brick (*the bar*) will not exceed the gameplay area, and the maximum for any axis is always 18. Please refer to the table below for more detailed information.

Mode	Minimum	Maximum
Basic	3 x 3 x 3	18 x 18 x 18
Advanced	4 x 4 x 4	18 x 18 x 18
Expert	5 x 5 x 5	18 x 18 x 18

Game Mechanics

Rotation
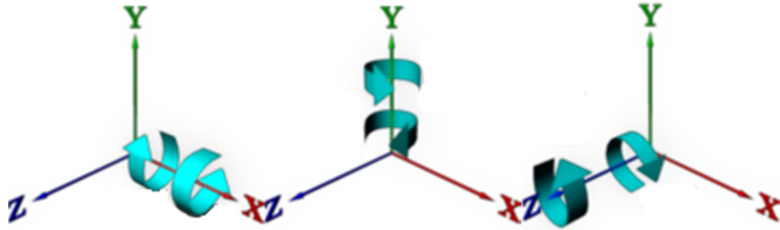
Rotation is the challenging factor in the game. The challenge is using your depth perception to be able to rotate a brick along all of the three axes. While you can move the camera around the playfield, rotation will always occur around a specific axis, whether it is the X-axis, the Y-axis, or the Z-axis. To get a feel of the brick rotation in Pit Blocks 3D, make sure you play the Tutorial when are you in-game!

Translation
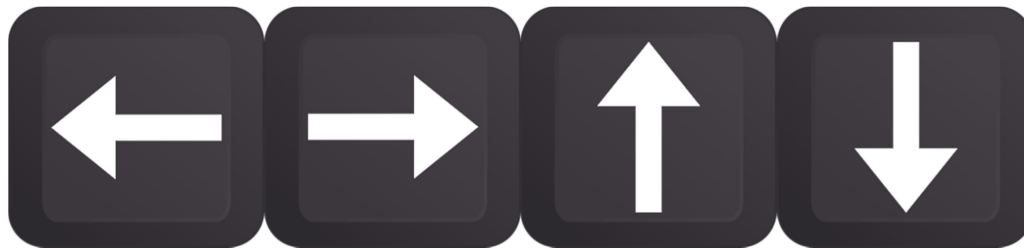
Unlike the rotation of a brick, the transition of a brick is simple and more straightforward. The camera position does not matter since no matter where you look at a brick from, left will always be left, and right will always be right, just as up will always be up and down will always be down. To get a feel of the brick transitions in Pit Blocks 3D, make sure you play the Tutorial when are you in-game!

Brick speeds

With each level that you beat, the falling speed of the bricks in the next level will increase. Falling speed is the time it takes for a brick to descend one pit "row". The fastest speed is higher (*therefore slower fall speed*) than the average human response time detected by the Human Benchmark (215ms). This should give you enough time to place bricks at a faster pace. The table below outlines the speed of the bricks for each level in the game.

Level	Fall speed (seconds)	Fall speed (milliseconds)
1	4s	4,000ms
2	3.25s	3,250ms
3	2.5s	2,500ms
4	1.75s	1,750ms
5	1s	1000ms
6	0.75s	750ms
7	0.5s	500ms
8	0.4s	400ms
9	0.325s	325ms
10*	0.25s	250ms

*And every subsequent level thereafter

Note: The speed of a rushed brick is 20ms, or 0.02s. You can still manipulate a brick while it's being rushed.

Gameplay

Upon starting the game, depending on which environment you have selected, the scrolling text will appear. You can fast forward this text by clicking on the text dialog, or you can skip it altogether by pressing the "Skip" button or pressing any escape key (*Escape* for keyboard, *Back* or *B* for controller). If the "None" environment is selected, then the play area will feature the pit by itself and a black background, with no story text dialog.

Brick formation

The brick will form at the top of the pit. Each brick is composed of 1 or more cubes, depending on the Game Mode selected (refer to the *Game Mode* section above for more details). The cubes can come together from any of the 4 cardinal directions relative to the pit. Once the brick is formed, you will be allowed to manipulate it as outlined above, and rush it to the bottom of the pit if you wish.

Scoring

The scoring is affected by multiple variables including **Game Mode**, **Pit Size**, **Current Level**, and **Assists**. The tables below outline the multipliers for each of the aforementioned variables. The general formula for the score to add is as follows: *ScoreToAdd * GameModeMultiplier * PitSizeMultiplier * AssistMultiplier*.

"*ScoreToAdd*" is the number of cubes affected multiplied by the current level (i.e.: *NumCubes * CurrentLevel*). The number of cubes affected can be the size of current brick dropped (e.g. 1 through 5) or if a row (or more) are cleared, the number of cubes in the row(s) (i.e.: *width * depth * # of rows cleared*); this is in addition to the dropped brick. This means that when you drop a brick, the formula is applied to that brick, and then, if there are any row clears, the formula is applied to the row clears.

Note: It is important to note that the additional assist scoring modifier governed by the **Assists** takes effect only for the next playable brick.

Game Mode Multiplier

Game Mode	Score Multiplier
Basic	1
Advanced	2
Expert	3
Random	2

Pit Size Multiplier

Pit Size	Score Multiplier
Minimum Size (3 x 3 x 3)	5
Any size in-between	(1 … 5)*
Maximum Size (18 x 18 x 18)	1

* The closer to minimum size, the closer to 5, and the closer to maximum size, the closer to 1.

Assist Multiplier

Target Assist	Shadow Assist		Score Multiplier
Disabled	Disabled		3
Disabled	Enabled		2
Enabled	Enabled		1
Enabled	Disabled		1*

* In this particular case, it doesn't matter if Shadow Assist is enabled or disabled because Target Assist is more powerful than Shadow Assist in guiding the player where the brick will drop.

Timing

The time for a particular level is determined by **Pit Size**, **Current Level**, and **Game Mode**. The minimum amount of time a level can have is *30s*, and the maximum is *15m*. The general formula for time per level is as follows: $PitArea^{PowerCoefficient}$, where *PitArea* is *width * depth*, and *PowerCoefficient*'s starting value is $1.1 + (\text{Log}_{10}(CurrentLevel) / 2)$. Additional calculations are made to compute the final time per level, which will not be outlined in this guide.

Environments

Pit Blocks 3D isn't just a cube-matching puzzle game. It also features 5 distinct and unique environments, each having their own storyline. This section of the guide outlines the basic expectations of playing through the environments. Some environments provide their own challenge as they are interactive.

Solar System

"You have arrived at the solar system. As part of a galactic exploration party of an advanced space-faring and cube-loving civilization, your Captain, Keen, has given you your first assignment. Your mission is to scout this system and its planets and to ultimately reach the core of the system, the Sun. The Pit has been retrofitted with special hyperspace-capable engines. They need time to cool down, so make sure you keep the engines ready to go by clearing the pit. You will rendezvous with the retrofitted Pit at Neptune. Do not let the engines drown in cubes! Good luck, space traveler. The Space Exploration Agency rests its hopes with you."

The Solar System is one of the easiest environments to play through. It provides no additional challenge other than time. The player starts by viewing the Solar System from afar where they are presented with the above scrolling text. The mood is set, and the adventure begins. Once the scrolling text finishes or the player skips it, the player hyperspaces over to Neptune where they can start playing the game and place the incoming bricks.

After battling through 5 levels of cube-matching frenzy, the player arrives at planet Earth, or level 6. At this stage, there is a short intermission before the player continues on to their journey to map the Solar System.

"This planet seems to be populated. The orbiting space station is an indication that the race inhabiting this planet is space-capable. Give your Pit time to scan this planet by beating this level so that you can move on and complete your mission. SEA Commander Keen is awaiting your report."

Once reaching the Sun, or level 9, the player is notified that their journey is almost over. Beating this level will complete the Solar System story arc.

"You have reached the Sun. Finish this level to fully map the Solar System."

Once level 9 is complete, the final piece of the story is displayed on-screen, congratulating the player on their journey and the mapping of the Solar System. The player can then continue playing to infinity and beyond with the Sun as background until the game ends.

"You have finished the Sun level. Congratulations, you have fully mapped the Solar System! The Space Exploration Agency thanks you for your service. You may continue to play to reach a new high score!"

Painted Forest

"You are a Treasure Hunter sent by Her Royal Highness to recover the lost treasure of the Great Warrior Red Shield hidden somewhere among these massive trees. It is rumored only the mystical cubes can open the intricate chest. Her Royal Highness bestowed upon you the rare honor of using one of her most trusted and loyal servants, the powerful Green Dragon Verdana. Verdana will be using her strong back to carry the Pit for you during your treasure-seeking adventure. Beware! Cubes can be heavy! Make sure you clear the pit to avoid adding pressure on Verdana's back. However strong she is, she has limits, too. Good luck, Treasure Hunter, the fate of the Kingdom rests on your shoulders... and Verdana's."

Much like the Solar System, the Painted Forest's main challenge is time. The player is greeted by a Green Dragon and fish swimming in a pond on the first level of this environment. There is a slight reaction from the environment when the last level is approached that will be further discussed below. Once the scrolling text finishes or the player skips it, the game begins and the player can start matching the bricks.

When the player reaches level 8, there is a short story message warning the player that the twin bears are guarding the secret treasure. The twin bears then take a swipe at the player in defiance attempting to deter them from pursuing their riches. This is the only slight interaction (or animation) of the environment.

"The Twin Brown bears! The treasure must be just around the corner. They must be guarding it. Chase them away by beating this level to reach the treasure."

At level 9, the player is greeted with another story message that tells them the treasure has been found and they must pass this level in order to open the chest.

"You have found the treasure! Great work! Now all you have to do is gather it. Beat this level to gain access to the treasure."

Level 10 has been reached, and the treasure chest is opened and the player can see the riches inside. The player can then continue playing to infinity and beyond until the game ends.

"You have gathered the treasure. Congratulations, you are now a wealthy cuber! You decide to use your proceeds to build and enhance the forest animals' habitat. Her Royal Highness and Great Mother Nature herself thank you for your kind and heartfelt work. You may continue to play to reach a new high score!"

Fantasy

Level: 1

Score
0

Level
1

Fall speed
4s

Blocks dropped
0

Rows cleared
0

Pit Cleared
0

"Disaster is imminent! Our esoteric mages brought us grave news! They say the Leviathan is about to rise and wreak havoc on the peaceful Fantasy Nation! Citizens and animals alike went into hiding. The roads are empty and the air is crackling in anticipation of the coming storm. You MUST seek and destroy the Leviathan before he rises. Only the magical power of the Cubes can defeat him. Do not fail, for all that you know and cherish will be lost forever. Beware of his henchman, the Troll, who seeks to secure his master's destructive power with unknown mystical artifacts!"

The Fantasy environment offers a little more in the ways of interaction, although it does not challenge the player from a difficulty standpoint. The two bosses of this environment (the Troll and the Leviathan) react to the player's brick drops. The Troll will get hurt, play a pain animation, and groan if the player places a brick below a certain pit height level, and swipe at the player as well as aggressively roar if the player drops a brick over that same threshold, indicating that the end of the game may be near. The Leviathan behaves in a similar fashion. Once a boss is defeated and the "Skip Transitions" option is not enabled, the camera focuses on the boss to show their ultimate and untimely passing into the nether world(s).

When level 8 begins, the player receives a communiqué from the mages news station stating that the end may be near since the Leviathan rose from the depths and is ready to rumble. The player must continue their cube-matching journey until the Leviathan is found and destroyed.

"The Leviathan rises! Panic ensues! Find the Leviathan, and defeat it before it's too late! His henchman, the Ugly Troll, is up and about, looking to secure the Mysterious Artifact, which is rumored to give the owner unlimited destructive power. Stop the Troll, lest no one shall survive."

On level 9, the player fights the Troll and hopefully survives the encounter. This is the first level of this environment where this is a good amount of interaction between the player's actions and the Troll. As mentioned above, the troll will respond to the player's brick drops and either groan in pain or roar in defiance of the player's behavior.

Finally, on level 13, which is the longest run of all environments, the player faces the Leviathan and gets ready to defeat him. If the player was able to handle level 10, 11, and 12 well, they won't have much of a problem with this level since the brick falling speeds for these levels is identical. The Leviathan exhibits the same behavior as the Troll as he as well reacts to the player's brick placing. If the player manages to clear a pit, the Leviathan is stunned. There is no achievement for this.

"The Leviathan. Defeat it. Good luck, cube warrior!"

Once the Leviathan is defeated, the player is free to play to infinity and beyond while standing tall over the Leviathan and the feat they achieved.

"The Leviathan has been defeated. Congratulations, you have saved the Fantasy Nation! Its inhabitants, the mages, the animals, and even the squirrels thank you for saving them. You may continue to play to reach a new high score!"

Ice Cave
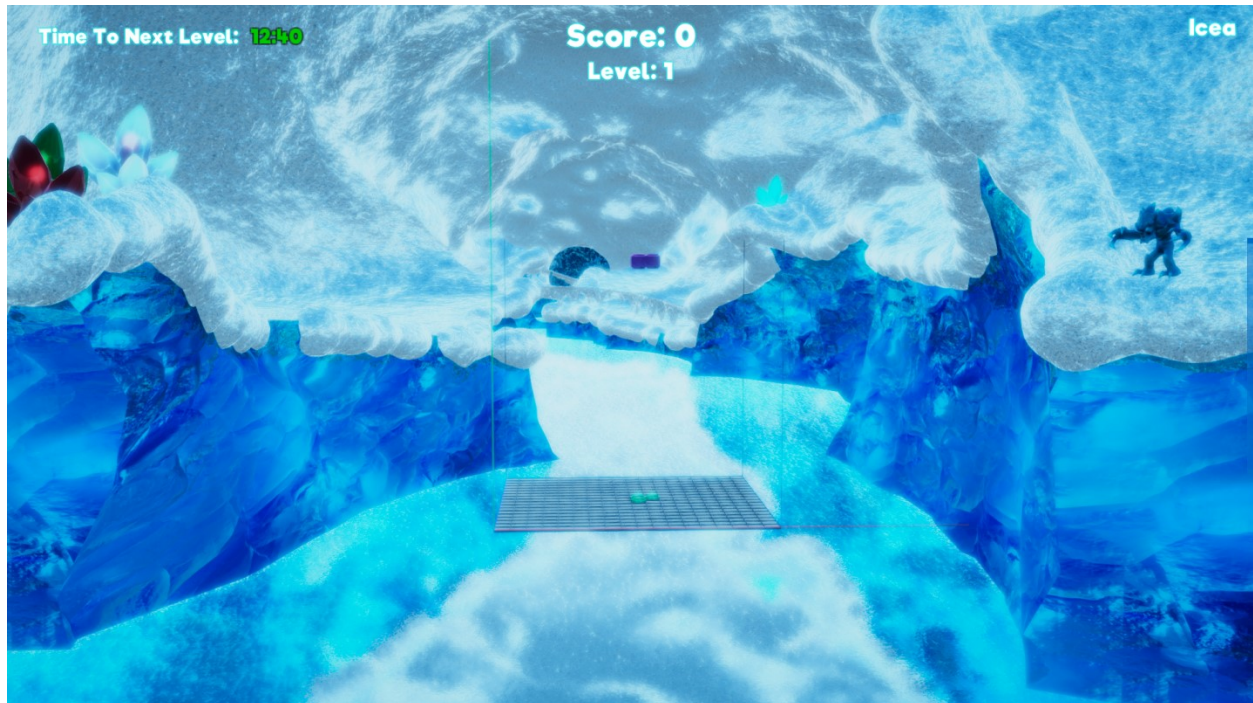
"This is the world of Alanea. It used to be a green and lush land before the grumpy old wizard Narcanom cast a frosty cube ice spell that engulfed the entire planet in ice. Centuries have passed and the wizard's edict has never been broken, thus the world was renamed Icea for its freezing temperatures and icy views. Alas, the wizard is long gone, but his creation, the once well-meaning dragon Aratea, lives on, corrupted by the spell. Many believe that defeating the dragon would restore the world of Icea back to its former warmth and glory. You enter Aratea's cave with a single goal in mind: defeat her. Your Pit will be using the planet's teleportation technology. As always, spells need recovery time, so make sure that the Pit remains as clear as possible to avoid drowning the spellcast in cubes. Go forth, hero! Restore balance, restore life! Good luck!"

The Ice Cave is a very difficult environment to beat. Reaching the final level, which is level 10 (also called Aratea), is an impressive feat for any player. Not only is the player challenged by the usual timer, but they also have to deal with an interactive environment that attempts to disturb you as much it can. The environment's inhabitants will shoot missiles at you that will either pass close enough to the camera, shaking it, or simply explode in a cloud of smoke right in the player's camera view, which will be bothering, or even annoying, the player. There is even a dragon that will breathe blue fire! This is also the environment that has the most amount of story text to go through. All of it can be skipped, of course.

Once the player defeats level 1 and starts level 2, the story message field is updated to let the player know that Aratea has taken notice of their existence and is probably going to send minions their way in an attempt to dissuade or disturb them enough to abandon their quests of restoring Icea to a glorious green world.

"Aratea's minions take notice of your progress. They will be seeking you soon. Beware!"

Comes level 3, the player is greeted with yet another message praising their calm demeanor for not hurting Aratea's minions. That's probably a good thing since that may have angered Aratea enough to swarm the player with minions. This is the level where everything changes from a player's comfort POV (point of view). The minions here start shooting ice missiles at the camera, which either swoosh by the player, shaking the camera, or exploding in a cloud of smoke. This can be avoided by moving the camera around.

"You have decided to spare the minions since they did not take any offensive action against you. The minions to come may not be so abstained..."

Level 6 is an interactive boss battle with Agalorr, the first lieutenant of Aratea. Agalorr has two tricks up his sleeve. He will often shoot ice missiles at you, and he doesn't miss. He has a small degree of pin-point accuracy failure (meaning he doesn't hit the camera bang on every single time), but each time the missiles pass close enough to the camera to shake it. He also summons two minions over the course of the fight with the player. The minions are summoned every 2 minutes. If the level's initial time is less than 2 minutes, the player does not get to see a summoned minion during this fight. Likewise, if the level's initial timer is greater than 2 minutes but less than 4 minutes, only 1 minion is summoned during the course of the level. A level that has a timer over 4 minutes will see both minions being summoned. Beware! Both minions shoot their own ice missiles!

"This is Agalorr, Aratea's First Lieutenant. You must get through him before you can reach her. Good luck!"

Having defeated Agalorr, the player is rewarded by no more ice missiles or ice explosions for the remainder of the environment. There will also be no enemies until the boss fight with Aratea. The player can now focus solely on dropping cubes if they were able to make it this far.

"You have defeated Agalorr. The path to Aratea is clear, nothing stands in your way now except... Beware! Narcanom's spell is negatively affecting the bricks' speed. Your reflexes and your strength of will must be stronger than ever to reach Aratea..."

Level 10 is the last level of this environment. Aratea awaits the player and is ready to fight. This is a very difficult level since Aratea breathes her blue fire constantly, which could greatly disturb the player. This could be mitigated a little by moving the camera around since Aratea blows fire only forwards in front of her, and she never changes her gaze.

"You have reached Aratea. Set her back to sleep to cleanse her of the corruption that infiltrated her body. Finish this level to see this through!"

Once Aratea has been defeated, the player earns a very tough achievement, and they are free to play to infinity and beyond while enjoying the icy cave views the environment has to offer.

"You have sent Aratea back into slumber. This will help cleanse her of her corruption and in time Icea will become Alanea once again. You have saved this world! Its remaining citizens thank you and wish you good luck in our future Pit Blocks 3D adventures. You may continue to play to reach a new high score!"

Volcano
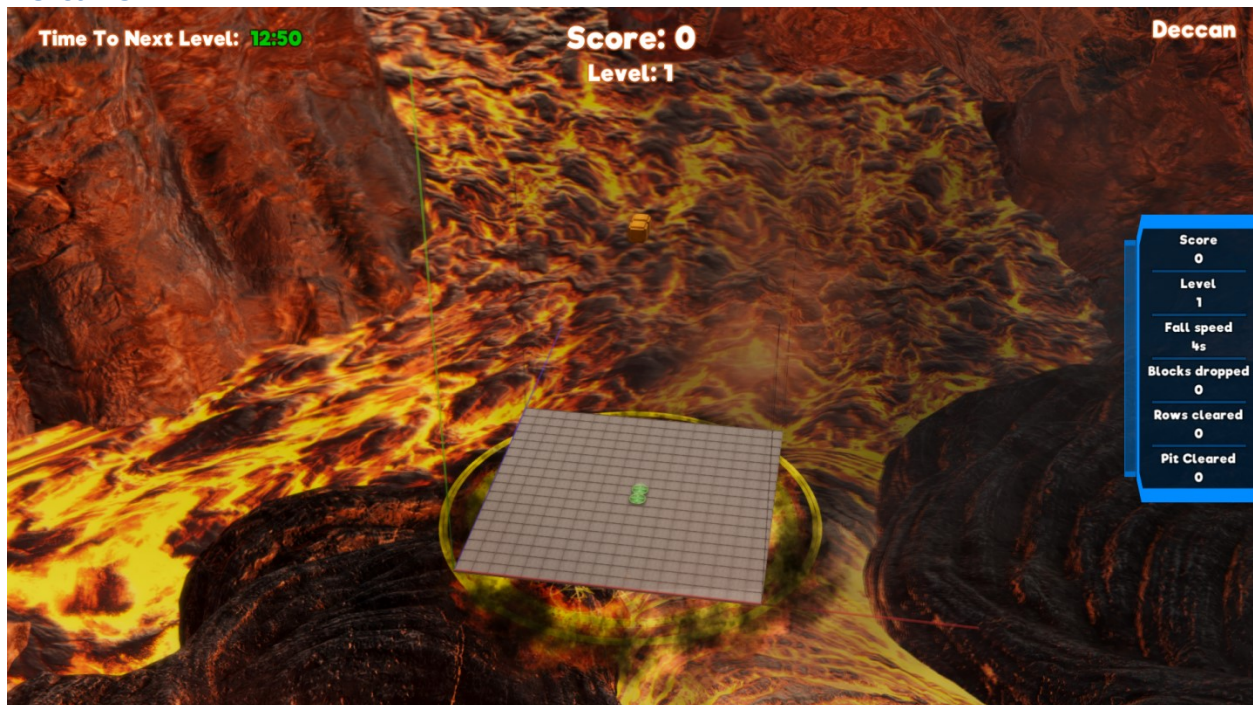
The Volcano environment is the most difficult of all environments, mainly due to its Level 8 artillery barrage of fire against the player by the volcano's fire minions. This is one environment where the player can fight back, however. Once an area (or a row without the 3rd dimension) is cleared in Level 8, a meteor storm will attack the fire minions and enrage them, making them roar. This will reset their attack timer and if the player scores a pit clear, this will increase the minions' re-arming of fire missiles by 1s each time. The final boss, Ferros, is a little easier, taking the behavior of the Troll and Leviathan from the Fantasy environment: when a brick drops at a low enough pit level, the dragon will groan in pain, and when a brick drops above that threshold, Ferros will breathe fire on the player.

Level 4 introduces the Ridge Lava Brutes. Don't worry, they are harmless. They mean business but they can't reach the player or the player's pit, so they perform stunts instead of an actual attack. They are here just to threaten the player from continuing on.
"That's a lot of Ridge Brutes. Let's hope they won't suddenly all jump at you at the same time. They seem ready to pounce..."

Level 5 introduces the player to Magma Elemental Ferx. This is one legit magma elemental that is ready to show you his skills. Much like Agalorr, he summons 5 fire elementals and shoots fire missiles at the player. Beware, the fire elementals shoot their own fire missiles! Remember to dodge their attacks by moving your camera around. They are summoned every 90s. Their aim, however, is not too accurate, but it will always be close enough to the camera to make it shake.
"Magma Elemental Ferx, a magnificent beast born of the Deccan Volcano. You have no choice but to pass through. Defeat Ferx."

The final level of the environment, level 10, is a face to face encounter with a fire dragon… a lava dragon… a magma dragon… a hot dragon! The player must beat this level in order to win the environment and earn their achievement. The dragon, Ferx, will follow the simple rules of engagement that the Troll and Leviathan follow in the Fantasy environment: if the brick placed by the player is low enough, then Ferx will be hurt; if the brick placed is too high, Ferx will breathe fire onto the player. Unlike Aratea that faces solely in one direction, Ferx will purposely shoot fire straight at the camera.

"A Lava Dragon! He must be guarding the coveted Lava Cake that you've been looking for. Put this Great Beast to rest to earn your title and your prize."

Once Ferx has been defeated, the player will earn their achievement and will be able to play to infinity and beyond until the game ends.

"You have defeated the Lava Dragon. Congratulations, you are now in possession of your coveted Lava Cake! You have proven yourself to be a fierce and sturdy Cube Warrior. History will forever remember you as the Cuber who has not wavered in the face of danger and the threat of melting cubes. You may continue to play to reach a new high score, Ultimate Cube Warrior!"

Cube Master

This achievement is given to the player that was able to complete all five environments in Expert mode. Good luck!

Tips

The following points are some tips that you may find useful in your cubing journey.

1. Be careful not to set your camera too close to a 45º angle (camera staring towards the closest corner of the pit). When the camera is around this angle, it becomes difficult for the player to figure out which way is up/down and which way is left/right since the translation of the brick is relative to the camera.
2. It is OK to pause the game, move the camera around, and plan your rotation/translation of the brick before unpausing the game, executing your strategy, and rushing the brick or just letting it fall to your intended destination. Sometimes this is a good strategy to employ when you have a lot going on or the falling speed of the brick is too fast to keep up with the structure of your pit.
3. Try placing the bricks as huddled together as you can so as to leave room for the next incoming brick(s) that may be difficult to place due to their shape.
4. Rushing a brick greatly increases the speed of the brick. However, you can still manipulate the brick during its descent.
5. If you are using a controller, you can use the *Left Shoulder* when the Main Menu is visible to quickly navigate to "*New Game*". Think of it as a shortcut.
6. If you are using a controller, you can handle the Stats Container (the blue box on the right-hand side of the game screen) by using the *Right Shoulder* button. This will either display the stats container, or set it aside to clear the UI.
7. If you are using a controller, you can swap the Left Stick / D-Pad keys for a custom gameplay experience in the *Options* menu > *Controls* > *Game Controller* > *Bricks Movement* options; simply enable or disable the **Swap DPad/LStick** checkbox.

Troubleshooting

General

Q: I have turned off Assists to increase my score, but they are not taking effect!

A: Assists will only take effect for the next brick and for all bricks thereafter until the Assist is once again turned on. This has been purposely implemented in this manner to prevent scoring abuse. Picture this scenario: a user attempts to cheat by using shadow/target assist to properly position the brick, then they disable the assists before rushing or placing the brick in the playing field. This will give the user a maximum scoring opportunity while using assists, which is considered cheating. No, it's not considered being smart and witty, it is just plain old cheating, which decreases the experience value for all other players involved.

Steam

Q: My controller is acting weird! What's the deal? The left stick or DPad is even rotating bricks! Unacceptable!

A: For some controllers, Steam seems to be altering input based on a predetermined template. To fix this issue and have the controller behave normally, try following these steps:

1) In your Library list, right click **Pit Blocks 3D**.
2) Click *Edit Steam Controller Configuration.*
3) Move your mouse to the bottom of the screen to reveal two new buttons.
4) Click "*Browse Configs*".
5) From the right-hand side menu, click "*Templates*".
6) Select the first "*Gamepad*" template from that menu.
7) Run the game – the issues exhibited should no longer occur. You may also experiment with different templates.

Note: The default template is Keyboard (W, A, S, D) + Mouse, which most likely accounts for this strange behavior.