

Table of Contents

Game Mechanics Comparison 2

Sonic (2D) vs. Sonic (Isometric)..... 2

Sonic the Hedgehog 1991 (2D) 2

 Overview: 2

 Game Mechanics:..... 3

 Character Controls and Moves: 4

 Enemies:..... 7

Sonic 3D Blast 1996 Sega 9

 Overview: 9

 Game Mechanics:..... 10

 Character Controls and Moves: 11

 Enemies:..... 14

Levels Comparison: 15

Game Comparison: 17

 Sonic the Hedgehog (2D) 1991 17

 Sonic 3D Blast (3D) 1996..... 18

Final Words: 19

 Sonic the Hedgehog (2D) 1991: 19

 Sonic 3D Blast (3D) 1996:..... 19

Game Mechanics Comparison

Sonic (2D) vs. Sonic (Isometric)

Sonic the Hedgehog is a video game franchise created by Yuji Naka, and is developed and owned by Sega. The franchise centers on a series of speed based platform games. The protagonist of the series is a human like blue hedgehog named Sonic, whose peaceful life is often interrupted by the series's main antagonist, Doctor Eggman.

Typically, all games in the series feature a blue hedgehog named Sonic as the central player character and protagonist. The games detail Sonic and his allies' such as Tails, Amy, and Knuckles attempt to save the world from various threats, primarily the evil genius Dr. Ivo "Eggman" Robotnik, the main antagonist of the series. Robotnik's aim is to rule the planet; to achieve this, he usually attempts to destroy Sonic and to acquire the powerful Chaos Emeralds.

The first game in the series, published in 1991, was conceived by Sega's Sonic Team division after Sega requested a mascot character; the title was a success and spawned sequels, and transformed Sega into a leading video game company during the 16-bit era in the early to mid-1990s.

While the first games in the series were side-scrolling platform games, the series has expanded into other genres such as action-adventure, fighting, racing, role-playing, and sports. The series has sold 150 million units as of November 2014, making it one of the best-selling franchises of all time.

Sonic the Hedgehog 1991 (2D)



Overview:

Sonic the Hedgehog for the Sega Mega Drive is the first title in the Sonic the Hedgehog series. The game's original programmer was former Sonic Team leader and series creator Yuji Naka, and the planner was Hirokazu Yasuhara.

The gameplay was faster than any other game before and amazed many people at launch. This was due to the Mega Drive's Motorola 68000 processor, whose basic speed and ability to handle 16-bit numbers gave it incredible speed compared to its predecessor, the Master System. Nevertheless, a separate 8-bit version, which focused more on exploration than speed, was later released for said system.

Game Mechanics:

Sonic the Hedgehog plays very similarly to other platformers, in which the character must get to the end of the stage in the allotted time, while collecting items along the way. Essential to the gameplay are the "Golden Rings" the player collects along his/her way in each level, a feature which would become one of the defining characteristics of the series.

These items are regularly placed around the level map and serve multiple functions. First, the player collects rings to protect Sonic. As long as they have at least one ring, the player will not lose a life when injured. Instead, when hit, up to twenty of the rings the player has collected will fly outward and scatter around the immediate area for some seconds, some of which can then be retrieved before they disappear. If the player runs into an enemy without a single ring, he/she will lose a life. If the player collects a hundred rings they will gain an extra life, and will gain an additional life for every a hundred rings after that, provided the rings are not lost.



An example of gameplay in the first zone: Green Hill Zone.

If the player has at least fifty rings at the end of an act, a giant golden ring will float above the finishing sign which can be jumped through to enter one of the Special Stages (this excludes the final act of a stage, when Sonic will enter a boss fight). At the end of each act, the total number of rings the player has is multiplied by a hundred and added to the player's score. During the score-tallying, the player can also jump through the air to find hidden emblems which can range from a hundred to 10,000 points.

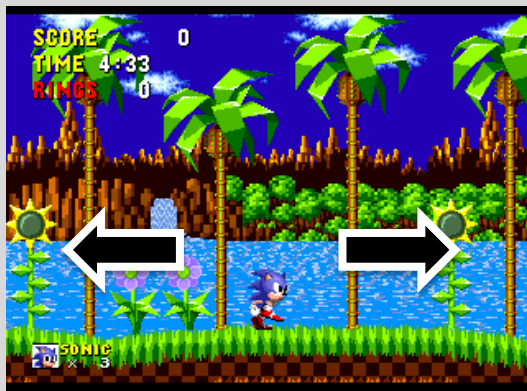
Also scattered throughout each level are video monitors/TV's which when broken by the character will reward the player with one of a variety of bonuses. These include a Shield which will protect Sonic from a single hit, a 10-ring bonus, an extra life, temporary invincibility (accompanied with a temporary change in music), and "Power Sneakers", which give the player a temporary speed boost (and increase the tempo of the music for the duration).

Despite the various types of protection available, neither the shield, rings, nor invincibility will prevent the player losing a life if Sonic is crushed (by a trap or between a wall and a moving platform), drowned, runs out of time (each act has a ten-minute time limit), or falls into a bottomless pit.

Progression through the game is made easier for the player by lamp posts that act as checkpoints. When Sonic passes a lamp post, the spherical top spins around and its color changes from blue to red, and the next time a life is lost, gameplay will restart at that point rather than at the beginning of the act.

Hazards that player experiences in gameplay include a wide variety of "Badniks" - these appear as animals trapped inside mechanical bodies which are released the moment the player hits them. Each badnik takes one hit to destroy, but they vary greatly from Zone to Zone; some will walk in a set path, others will try blasting the player, and some cannot be avoided at all. The player must also avoid rows of sharp spikes, cliffs, and elaborate death traps.

Character Controls and Moves:



Walk:

Push left or right on the D-pad to initiate Sonic's movement in either direction. As you hold the button down, Sonic gains speed gradually.

Run:

Begin walking and hold down the button to make Sonic gain speed. After a few seconds, he'll break into a run.

Screech Halt:

While running, quickly press and hold the opposite direction on the D-pad to make Sonic screech to a halt. He'll skid for a short distance, based on how fast he was moving.

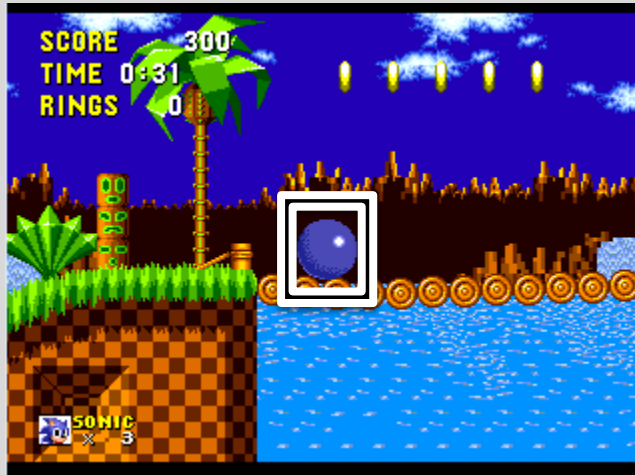
Look Up:

While standing still, press up on the D-pad to make Sonic gaze to the sky. As you hold up, the camera pans upward, giving you a view of Sonic's overhead surroundings.

Crouch:

While standing still, press down on the D-pad to make Sonic duck down. As you hold down, the camera pans downward, giving you a view of the stage beneath where Sonic stands

Spin Attack (Ground):



Often called the Spin Attack or just the roll in later games, pressing down on the D-pad while moving will make Sonic curl into a rolling attack. He'll remain in this position until you jump or slow down. The speed of Sonic's movement while in spin mode is based on how fast you're moving when you launch it, and also on the terrain Sonic rolls along.

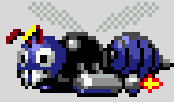
Spin Attack (Mid-Air):



Pressing an action/jump button at any time will make Sonic leap into the air with rolling attack. The height of the jump is proportional to how long you hold the button down.

Push:

Certain blocks can be pushed by running up against them. Continue holding the D-pad against the offending cube to have Sonic push it along the ground. This sprite will be shown if you attempt this with an object that can't be pushed but won't harm you.

Enemies:**Appearance- Green Hill Zone****Buzz bomber:**

Blue bee bots that actually look like wasps with two yellow antennae with an engine that flies across from the right side of the screen, pausing once to fire a large flashing projectile from their stingers diagonally downward at Sonic.

**Chopper:**

Red piranha bots that leap upward from beneath bridges, trying to chomp Sonic. It's best to walk on bridges while in a ball form.

**Crabmeat:**

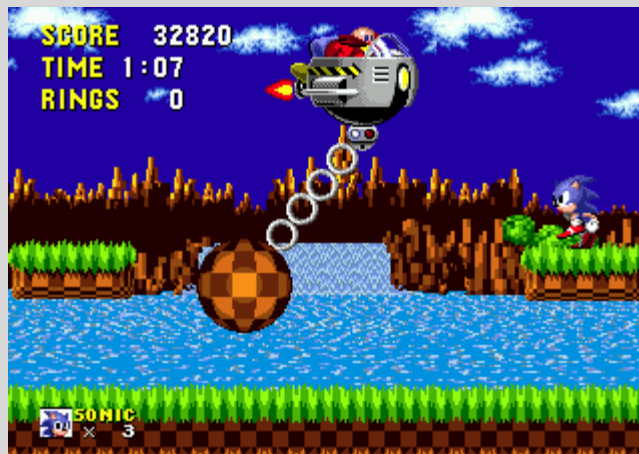
Red crab bots with six grey legs that crawl along the ground and fire projectiles from their pincers and shoot three inches in the air and then the projectiles drop to the ground.

**Moto Bug:**

Beetle bots with one wheel and two claws, a blue head, an engine, and a red back that roll innocently along the ground. They appear in Green Hill Zone. They are designed after ladybugs.

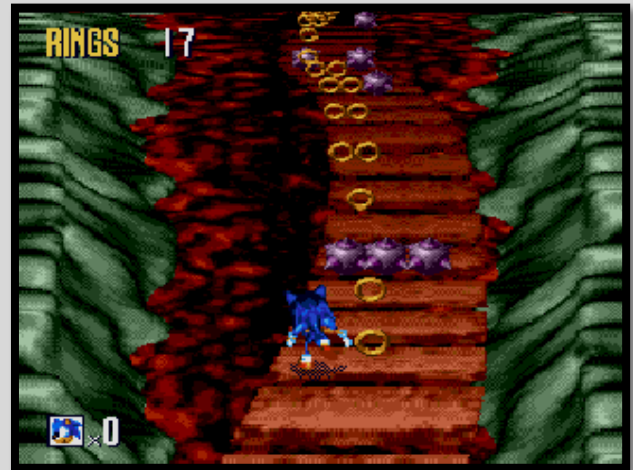
**Newtron:**

These chameleon bots hang out on the side of cliffs and remain invisible until approached. They come in two colors: blue ones transform into missiles and jet along the ground. Green ones appear just long enough to fire an energy blast at Sonic.

Boss: Egg Mobile-H

The checkered wrecking ball-wielding Egg Mobile is the first boss in Sonic the Hedgehog. The player fights it at the Green Hill Zone Act 3, where it is piloted by “Dr. Robotnik” and equipped with a massive, checker-board pattern wrecking ball that hangs suspended from its underside by a chain, swinging back and forth.

Sonic 3D Blast 1996 Sega



Overview:

An isometric, pseudo-3D (2.5D) game, was released for the Mega Drive in 1996. It was developed in the United Kingdom by Traveler's Tales and published by Sega.

The Japanese version was released simultaneously with Sonic Adventure International as a Sega Saturn exclusive under the Flickies' Island name, although later re-releases of the Genesis version used the Blast name in Japan.

In contrast to the other Sonic games released for the Sega Genesis, which were 2D sidescrolling platformers, this game is played from an isometric viewpoint in a 2D environment and uses pre rendered 3D sprites, displaying pseudo-3D graphics.

In the game, Doctor Robotnik discovers mysterious birds called flickies that live on an island in an alternate dimension. He learns that they can travel anywhere using large rings, so he decides to exploit them by turning them into robots to help him search for the Chaos Emeralds. Sonic must find and destroy these robots located around the zones, and bring the flickies inside them to large rings. Once he collects all five flickies from each section of an Act, he is either further advanced into the Act, or taken to the next Act. Every Zone has three Acts, 2 involving standard levels, and the third Act being a boss fight against Robotnik, without any flicky-collecting involved.

If Sonic or the flickies are hit by an obstacle or enemy, the flickies scatter. Each individual flicky's color determines how it behaves. Blue and pink/orange ones make an effort to find Sonic, while green and red ones wander off at random, the latter even jumping about, making them harder to re-collect.

Game Mechanics:

Sonic's main objective in this game is to find all the Flickies in a designated area and bring them to the goal. Only then can the player continue on to either the next portion of the level or the next Act. As opposed to the traditional two-dimensional game play like "Sonic the Hedgehog 1991", the playing field is presented in an isometric, 45-degree angle. Even though everything is still sprite-based, the camera gives the allusion that Sonic is in a 3D world, able to see everything around him instead of just left and right.

Each Zone in the game, with the exception of Final Fight, is split up into three Acts. The first two Acts, present Sonic with the same objective: to collect the Flickies so Sonic can reach the end of the level. Broken up into either two or three sections per Act, Sonic rushes about encountering Eggman's many Badniks. Destroying them is the only way Sonic can rescue the Flickies from being a living battery. Just freeing them isn't enough, the player having to touch the Flicky to make it follow Sonic's every move. No matter where in the game, there are always five Flickies that need to be brought to the goal ring. They can be deposited one at a time, all at once, or any degree in the middle, but only sending five back to their home dimension at once will insure the maximum amount of points available.



The four Flickies in flight

There are four different Flickies that populate the game, each with their own travel behavior once free. The most common and familiar of the group is the Blue Flicky, who make a conscious effort to find Sonic. If they cannot find him, they fly around in a tight circle, making them easy to locate. The second type is the Pink Flicky, which acts largely like blue ones, but fly around in bigger circles if unable to find Sonic. In the Mega Drive's Volcano Valley Zone, the pink Flickies appear bright orange, presumably due to color palette limitations.

Red Flickies constantly move between two close points, not making any effort to find Sonic. Their movement range is small, but they jump very high and can thus be hard to catch. Rounding out the bunch are Green Flickies. Perhaps the most frustrating, they wander randomly with no interest in finding Sonic, even sometimes appearing to try and avoid him.

Once a Flicky has made contact and follows Sonic, the player must still be aware of their surroundings. If Sonic takes damage while not wearing a shield, all the Flickies that are currently connected to him will disperse. Even if Sonic doesn't take damage, stray projectiles and other hazards can separate hedgehog from bird, and if one isn't paying attention, it's possible to reach the end of a level to deposit the Flickies one has collected, and realize that the fifth has gone missing. Once Sonic jumps at the ring, swings through and all five birds are safe and sound, the ring disappears, allowing the player to either continue on in the game if a trap door lights up, or to finish the Act if there is an "X" on the ground.

Item boxes also appear through the game, containing familiar power-ups to assist Sonic in his journey. Speed Shoes and invincibility are sprinkled about, allowing Sonic to gain an extra burst of speed or

protect him from enemies and hazards respectively. 1-Up boxes grant the player extra life, while the original shield from "Sonic the Hedgehog 1991" returns, protecting Sonic and the Flickies from a hit that would otherwise cause Sonic to lose his rings and the birds that follow. The "Flame Barrier", appears in levels that have a fire hazard. The Gold Shield, which gives Sonic the new ability called "Sonic Blast Attack." Pressing the jump button twice allows Sonic to land attack on a nearby enemy, popping it open without fear. Along with springs, spikes, and bumpers, the checkered landscapes of "Sonic 3D Blast" fit in with the aesthetics of Sonic's world, even if the controls are vastly different.

Character Controls and Moves:

Due to the isometric nature of the game, Sonic controls slightly different than he normally does. While left and right on the D-pad still move Sonic in those directions, pressing up and down will move Sonic across the board just the same. The diagonal inputs on the Mega Drive controller finally come in handy, giving Sonic precise movement across each stage. The A and C buttons once again allow Sonic to jump into the air, curling into a ball and performing a spin attack that can destroy enemies, as long as Sonic doesn't land on spikes. Because Sonic can no longer crouch, the B button has instead become concerning method of having Sonic perform his other signature move, the Spin Dash. Standing still, holding the button down will rev up Sonic, and allowing him to burst ahead in any direction, even able to destroy certain barricades. If Sonic is already in motion when B is pressed, he will curl into a ball and roll forward until his momentum is spent.



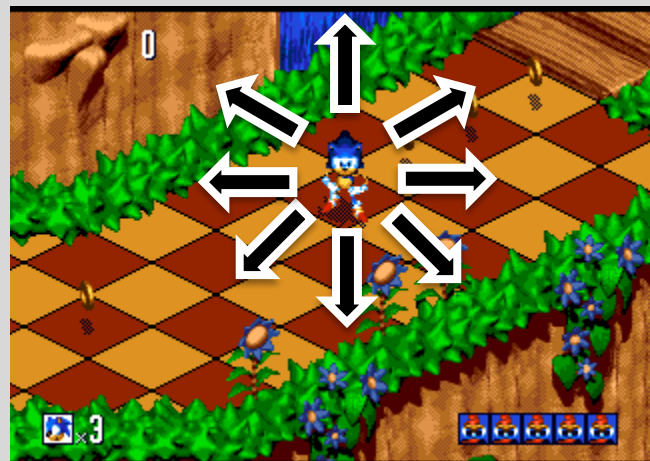
Sonic the Hedgehog in action.

Sonic gradually gains speed on keeping a 'Movement' button pressed, and by this speed Sonic actions can be further altered by the player.

- Up: Sonic runs North
- Down: Sonic runs South
- Left: Sonic runs West
- Right: Sonic runs East

Advanced

- Up Right: Sonic runs North East
- Up Left: Sonic runs North West
- Down Right: Sonic runs South East
- Down Left: Sonic runs South West



Actions**Jump:**

According to the surface Sonic is standing, Sonic jumps in different ways.

And Depending on Sonic speed, the jump height differs.

**Spin Attack:**

Upon pressing the B button Sonic goes into Roll Charge Mode which decides the speed and distance of the dash. The dash applies B button is released.



Enemies:

Appearance- Green Grove Zone



This is one of the first enemies encountered in Green Grove, the first zone of Sonic 3D. Resembling a purple-and-yellow wasp (although it doesn't fly), the Badnik simply wanders around in an erratic motion. It can only harm Sonic by bumping directly into him; destroy it with a Spin Dash or jump to recover its organic battery power source, a Flicky.



This is an enemy encountered in Green Grove, the first zone of Sonic 3D. Possibly modeled after a hermit crab (but with eyes in its shell), this Badnik doesn't move from its position, though, it will swivel round towards Sonic's direction when he is nearby. Its defense comes in the form of a levitating spike ball which orbits around it. Destroy the robot with a spin dash or jump to recover its organic battery power source, a Flicky.

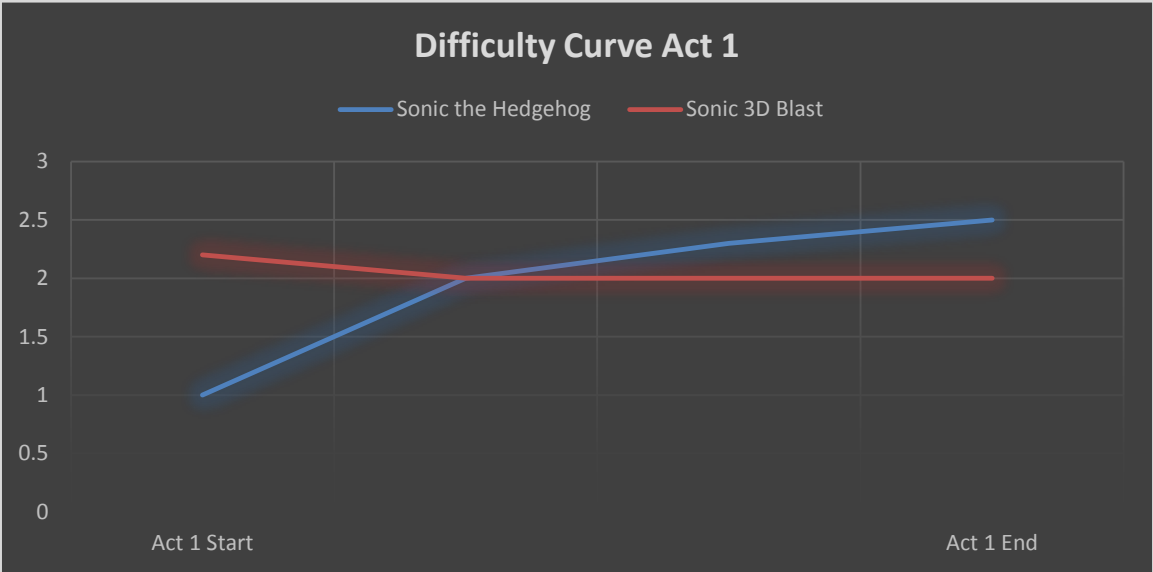


This is an enemy encountered in Green Grove, the first zone of Sonic 3D. This enemy is a leaping robotic worm. It spends much of its time underground, but the locations it will pop up are easily identified in the form of two dark pits which it jumps between. Attempting to defeat the Badnik with a spin jump while it's in the air may prove difficult, mis-time the leap and Sonic may end up losing his rings (and Flickies) by connecting with the spiked tail. A more cunning method is to charge up a Spin Dash right on top of the hole; the robot will dive right into the spinning hedgehog and be destroyed, releasing its organic battery power source, a Flicky.

Levels Comparison:

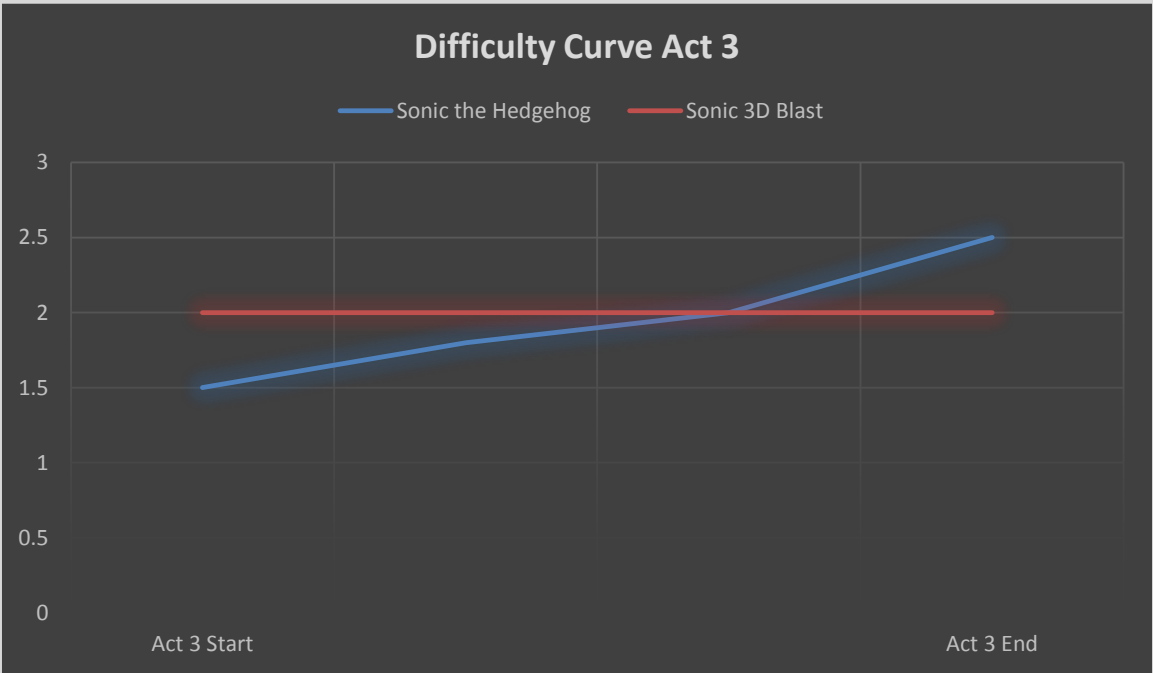
Act 1: level 1

| Sonic the Hedgehog (2D) 1991 | Sonic 3D Blast (3D) 1996 |
|--|--|
| Player starts with almost no enemies and a simple path, then ends with facing different types of enemies and different types of paths which lead to different resolutions, dying is one of them. | The beginning of the game is bit hard as the Player requires time to understand all controls and abilities. And also the main Objective of that specific level so that he can move on to next. Then the player has to complete the Objectives, which is fairly easy once understood what needs to be done. |



Act 3- Boss Fight

| Sonic the Hedgehog (2D) 1991 | Sonic 3D Blast (3D) 1996 |
|--|---|
| Same as Act 1, player starts and proceeds with enemies and paths with rising difficulty but the level ends with a “Boss Battle” which is very difficult and different compared to the whole level. | The player starts the level with a “Boss Battle” on hand. But the boss is different than any enemies the player had faced from previous levels but the difficulty curve is constant because there is only one enemy with one resolution in player’s mind. |



Game Comparison:

Sonic the Hedgehog (2D) 1991

| The Good | The Bad |
|--|--|
| <p><i>Animation</i></p> <ul style="list-style-type: none"> Cute, colorful graphics have a good deal of charm and personality Loveable Characters Beautiful, and crisp graphics | <p><i>General</i></p> <ul style="list-style-type: none"> Priced a little steep for a fairly short game |
| <p><i>Sounds</i></p> <ul style="list-style-type: none"> Great soundtrack and memorable sound effects | <p><i>Controls</i></p> <ul style="list-style-type: none"> Constantly having to continue playing until you learn the quirks of the levels Requires too much memorization Can sometimes lose control of our character |
| <p><i>Gameplay</i></p> <ul style="list-style-type: none"> Nearly perfect design and non-stop exciting gameplay Short but highly re-playable Challenging gameplay Fast-paced, responsive platforming action Fun sense of speed and great level design Cool power-ups like invincibility and shields | <p><i>Gameplay</i></p> <ul style="list-style-type: none"> the game has no save feature, so if you're dead-set on completing the game you'll have to do it in one strong sitting The levels are big Later levels can get frustratingly tough |
| <p><i>Camera</i></p> <ul style="list-style-type: none"> Camera angle found in traditional platform games like Mario. Where you get enough room ahead of you to react to situations, such as jump, dodge, or kill an enemy. | |

Sonic 3D Blast (3D) 1996

| The Good | The Bad |
|--|--|
| <p><i>Animation</i></p> <ul style="list-style-type: none"> • pretty impressive backgrounds • Colorful graphics | <p><i>Animation</i></p> <ul style="list-style-type: none"> • Sonic's doesn't look superb. The people who animated him seem to have tried to get away with little animation. • While standing, Sonic doesn't move at all. • He can only even tap his foot in one single perspective. • He also can't move fast, and his walking animation isn't really in sync with his speed, so he looks like he's skating, but he's not. |
| <p><i>Sounds</i></p> <ul style="list-style-type: none"> • chipper music | <p><i>Controls</i></p> <ul style="list-style-type: none"> • Sloppy, slippery controls • You also can't control your jumping properly. Often the player jumps and goes too far or not far enough and miss the platform and have to try again |
| <p><i>Gameplay</i></p> <ul style="list-style-type: none"> • impressive bonus rounds which are fast-paced | <p><i>Gameplay</i></p> <ul style="list-style-type: none"> • Plodding and tedious collect-a-thon gameplay • Sonic is quite slow • when we try to stop, Sonic acts as though he's ice skating, and what's worse, is that there's a snowy level in the game • player gets boring really easy • limited save-game system |
| | <p><i>Camera</i></p> <ul style="list-style-type: none"> • Isometric perspective clashes awkwardly with emphasis on jumping |

Final Words:

Sonic the Hedgehog (2D) 1991:

As Sonic, you must traverse a series of levels, divided up into multiple stages, while rescuing innocent animals from the clutches of the sinister Dr. Robotnik. It's pretty impressive to see the little guy tearing through a level, going through loop-de-loops, and bouncing around like a pinball at breakneck speeds.

The game is cute and colorful as ever, and its catchy theme song and all-around great soundtrack still shine through. The gameplay itself is very easy to get into; you've got a jump button and that's it. Sonic's jump doubles as an attack, and he can turn into a very dangerous, fast ball if he tucks in while running. You accelerate faster and faster if you have enough of an uninterrupted runway, and the game's levels tempt you to pick up speed so that you can reach more and more gold rings and other bonuses. One of the game's distinguishing traits is how Sonic can always survive taking a hit from an enemy so long as he has at least a single gold ring in his possession but getting hit causes him to drop every last ring he's carrying. Since more rings mean bigger points and extra lives, you'll be compelled to grab as many as possible yet getting greedy about getting more rings sometimes puts you in harm's way, so there's an interesting balance of risk and reward. Also, the wide-open, puzzle-like level designs of Sonic the Hedgehog feel very different from those of similar games, which tend to be a lot more compact. Things like this helped Sonic quickly stand out.

Sonic 3D Blast (3D) 1996:

Entering the 3D world hasn't changed Sonic much. He still runs pretty fast (although not nearly as fast as he did on the old mega drive platform), he still has to regain the Chaos Emeralds, and he still has to beat Dr. Robotnik by jumping on the glass dome of his spherical ship. The only real difference is that Sonic has the freedom to run in many different directions. And while the game doesn't break any new ground from either a technological and story standpoint, it does prove to be good fun with an old-school feel.

In Sonic 3D, players must complete a task in every level. Gone are the days when Sonic would blaze through a level, leaving nothing behind but a blue streak. The 3D hedgehog must beat five enemies (and there are only five enemies in each section, so Sonic's main chore is finding these little guys). A defeated enemy reverts into a little bird, called a Flicky. (Score yourself an extra five points if you remember the ultra-obscure Genesis game Flicky, where these crazy birds were born.) Sonic must carry these Flickies to the giant ring at the end of the level and see them through it. Only when the task is complete can you and Sonic move on.

Sonic 3D Blast is an entertaining game. The music is great and the graphics are very colorful. But wandering around the levels looking for the last enemy gets boring very quickly. Had this game been

more action oriented, with more enemies and much faster gameplay, it would have truly lived up to the Sonic name.

The poor controls in conjunction with the isometric viewpoint and change in the previous Sonic formula, stating "you can't deny that the game's core design is repetitive and, ultimately, kind of bland. The sense of speed and intense action that Sonic's name was built on is absent here, replaced by, essentially, a looping, lazy fetchquest."

However, there were still common complaints that "...wandering around the levels looking for the last enemy gets boring very quickly. Had this game been more action oriented, with more enemies and much faster gameplay, it would have truly lived up to the Sonic name." Entertainment Weekly was harder on the Saturn version of the game than the Genesis version, claiming that "while 3D Blast is super by 16-bit standards, it falls flat on Saturn, where 32-bit games with far more sophisticated 3-D graphics and gameplay are the norm."