

= Ballistics (video game) =

Ballistics is a futuristic racing computer game developed by Grin and published by Xicat Interactive in 2001 . Grin developed an arcade version of the game , released in 2002 featuring a unique reclined seating position cabinet by Triotech . Players race across seven different tracks in various leagues against other competitors on high @-@ speed hoverbikes .

The game was Grin 's first to be released , and featured the first version of their Diesel game engine . Grin worked closely with NVIDIA to incorporate then new technologies into the game , and was marketed as one of the flagship titles for the GeForce 3 Series of graphics cards .

Critical reaction was generally favourable , with reviewers being impressed by the beauty of the graphics and the thrilling depiction of speed . They were however , slightly disappointed with the shallow nature of the gameplay . A newer version of the arcade game was released in 2003 , incorporating motion simulator technology into the arcade cabinet .

= = Gameplay = =

Set in 2090 , the game is centred on a fictional extreme racing sport known as Ballistics , a descendant of Formula One . The player takes the role of a Ballistic 's pilot , racing hoverbikes called speeders through the inside of tubes which form the courses . The speeders are magnetically attached to the race surface , allowing the player 360 degrees of movement along the left / right axis . The player can detach the speeder from the track and navigate down the center in order to avoid track obstacles and to acquire the power @-@ ups exclusively located there . Players must try to follow the outside of each curve , as hitting the inside of a curve at speed could lead to an involuntary detachment , leading to a loss of control and seconds dropped in securing reattachment .

Heat levels on the speeder must be monitored , as although there are no set top speeds for the vehicles , they can explode if allowed to overheat . Heat builds up from acceleration and from collisions . To counteract this , the player may activate the onboard cooler , however , this will slow the vehicle down . Designated cooling strips along the track and the Ice power @-@ up can cool the vehicle without a speed penalty , allowing the player to continue accelerating .

Speeders have a boost meter , showing how much fuel is available for the onboard speed boost . Although the boost provides greater speeds and acceleration than the standard throttle , it also increases the speeder 's heat levels . Designated booster load zones along the track replenish the meter , and a super boost power @-@ up is available which doubles the potency of the boost .

Players are rewarded with cash for attaining high speeds , placing highly in races and obtaining the Flip @-@ Score power @-@ up . Cash can be used in between races to upgrade their speeder by purchasing new parts . Parts are split into four categories - chassis , cooler , engine and front shield , with each affecting the speeder in different ways . Some tracks may favour a particular set @-@ up over others .

There are seven tracks included in the game , with locations inspired from different parts of the globe , from Belize to Tokyo . Progression through the game is achieved by competing in and winning races against computer controlled racers spread over different tracks and in different leagues . Players begin in the Rookie league , across three of the tracks , where the chances of detachment from the race surface are decreased and rates of acceleration reduced . Success in the Rookie league unlocks the less forgiving Pro league with more tracks on which to compete . Further success unlocks the most difficult league , the Ballistics league , competition in this league occurs across every track and to complete this , the player must place first in every race .

Success in the game relies on track memorisation , fast reflexes , careful balancing of heat and boost levels , and selecting the right set @-@ up for each track . The game is marked for its pure focus on speed , with speeds breaking mach 3 depending on the players skill . At these speeds the graphics and audio blur and distort , and have been compared with the psychedelic vortex sequence of 2001 : A Space Odyssey . Ballistics supports multiplayer gameplay for up to eight players across a LAN or internet .

= = Development = =

Ballistics was the first game developed at Grin . Careful planning and production methods enabled a very quick completion time of 6 months ; the game was finished before even acquiring a distribution partner . Grin used TQM methods to ensure a high standard of work , and JIT techniques to ensure the timing of different production phases came together .

The prime inspiration for the game was Formula One , and Grin tried to recreate the feeling of speed captured by the in @-@ car cameras . In order to achieve a good on screen reference for the speeds attained , the track was redesigned into a tunnel , allowing the entire screen to act as a reference . Coupling this with scenes of the outdoors enabled Grin to create " a total speed simulation " . The settings were inspired by various sources , the city tracks drew inspiration from the films Blade Runner and The Fifth Element , other tracks took their inspiration from nature , such as the Amazon Rainforest and snow scenes of Siberia . Ballistics took cues from other futuristic racing games , such as WipEout and Rollcage , emulating the fun and the speed whilst taking it even further with high end graphics .

The graphics engine used to power the game was christened the Diesel Engine . Grin developed this engine for flexibility and scalability , allowing the engine to be easily upgraded with new features . Based on DirectX , this meant the engine could be used across Windows and Xbox platforms . Grin worked closely with NVIDIA to incorporate then new technologies such as pixel and vertex shaders to render complex scenes . Ballistics was marketed by NVIDIA as a flagship title for their new series of GeForce 3 graphics cards . The game came bundled with various versions of the GeForce 3 , with distribution of the bundled game handled by Interplay OEM . Later versions of the Diesel Engine would be used in Grin games such as the Windows version of Tom Clancy 's Ghost Recon Advanced Warfighter .

= = Arcade version = =

Grin announced in May 2001 that it was working on an arcade version of Ballistics for distribution by Triotech . The game 's gameplay had to be reworked to suit an arcade environment , and support was added for multiplayer games with up to eight linked cabinets . Triotech designed a unique reclined seating cabinet for the game , the aim of the design was to offer the player a more comfortable and immersive experience . The inspiration for the design came to Triotech co @-@ founder , Ernest Yale ; who whilst putting his feet up on the desk , realised how comfortable the playing position was . Ballistics was released for arcades in January 2002 .

The game would be updated twice for the arcade . Ballistics 2003 , launched in early 2003 , incorporated Triotech 's MadWave Motion motion simulator technology into the cabinet . Providing force feedback through the seat , this allows the player to experience up to 2g of acceleration whilst playing the game , with actuators in the seat providing 100 movements per second . A further version of the cabinet , Super Ballistics was launched in September 2003 . Chris Morris , listed Ballistics 2003 as one of the top " Video game gifts for the obscenely rich " in his Holiday 2004 column at CNN Money .

= = Reception = =

Critical reception towards the game was largely positive , albeit lukewarm ; receiving a rating of 71 % at review aggregation website Metacritic . Reviews generally praised the high graphical standard in the game , PC Zone described the visuals as superb and praised the use of " transparent surfaces and open frameworks to alleviate the potential monotony of racing through a drainpipe . " IGN echoed this , stating that at those moments where " a solid tunnel breaks into a transparent one " , " the true meticulous nature of the courses can be realized " . GameSpot praised the graphical effects , describing them as " a psychedelic display of cosmic lighting and motion @-@ blur wizardry " .

Reviews were agreed on Ballistics ' successful implementation of " a total speed simulation " ; PC Zone stating that " Ballistics is , in fact , the fastest racing game ever " , and Eurogamer commenting that this was a game that made " Wipeout look like Driving Miss Daisy " . Although IGN felt that at times the " ridiculous speed actually often works to debilitate [the gameplay] " .

The gameplay was less well received , and reviewers commented on the lack of depth to the gameplay and that the inclusion of only seven tracks meant the game lacked variety . PC Gamer (US Edition) noted that whilst " the game delivers an intense , thrilling experience " , this only lasted " 20 minutes or so " . GameSpot shared similar sentiments , stating that " Ballistics loses much of its fascination within the first few hours of playtime " and that it would only take four or five practice sessions per track to master the game .

Still , some critics found the game very enjoyable and exciting . Eurogamer closed their review stating that " when you get ' in the zone ' " , " the sheer adrenaline rush is unbeatable " . PC Zone finished by stating that " Ballistics really will leave your adrenal gland as dry as a stiffened sponge " .