= Game Gear =

The Game Gear (????? , G?mu Gia) is an 8 @-@ bit handheld game console released by Sega on October 6 , 1990 in Japan , 1991 in North America and Europe , and Australia in 1992 . The Game Gear primarily competed with Nintendo 's Game Boy , the Atari Lynx and NEC 's TurboExpress . The handheld shares much of its hardware with the Master System and is able to play its own titles as well as those of the Master System , the latter being made possible by the use of an adapter . Containing a full @-@ color backlit screen with a landscape format , Sega positioned the Game Gear as a technologically superior handheld to the Game Boy .

Though the Game Gear was rushed to market , its unique game library and price point gave it an edge over the Atari Lynx and TurboExpress . However , due to issues with its short battery life , lack of original titles , and weak support from Sega , the Game Gear was unable to surpass the Game Boy , selling 10 @.@ 62 million units by March 1996 . The Game Gear was succeeded by the Genesis Nomad in 1995 and discontinued in 1997 . It was re @-@ released as a budget system by Majesco in 2000 , under license by Sega .

Reception of the Game Gear was mixed, with praise for its full @-@ color backlit screen and processing power for its time, criticisms over its large size and battery life, and uneven reception over the quality of its game library.

= = History = =

Developed under the name " Project Mercury " , the Game Gear was first released in Japan on October 6 , 1990 , in North America and Europe in 1991 , and in Australia in 1992 . Originally retailing at JP \pm 19 @ ,@ 800 in Japan , US \$ 149 @ .@ 99 in North America , and GB £ 99 @ .@ 99 in Europe , the Game Gear was designed to compete with the Game Boy , which Nintendo had released in 1989 . The console had been designed as a portable version of the Master System , and featured more powerful systems than the Game Boy , including a full @-@ color screen , in contrast to the monochromatic screen of its rival . In order to improve upon the design of their competition , Sega designed the Game Gear with a similar shape to a Genesis controller , with the idea being that the curved surfaces and longer length would make the Game Gear more comfortable to hold than the Game Boy . Despite the similarities the Game Gear shared with the Master System , the games of the latter were not directly playable on the Game Gear , and were only able to be played on the handheld by the use of an accessory called the Master Gear Converter . The original Game Gear pack @-@ in title was Columns , which was similar to the Tetris cartridge that Nintendo had included when it launched the Game Boy .

With a late start into the handheld gaming market , Sega rushed to get the Game Gear into stores quickly , having lagged behind Nintendo in sales without a handheld on the market . As one method of doing so , Sega based the hardware of the Game Gear on the Master System , albeit with a much larger color palette than its predecessor : the Game Gear supported 4096 colors , compared to the 64 colors supported by the Master System . Part of the intention of this move was to make Master System games easy to port to the Game Gear . Though the Game Gear was designed to be technologically superior to the Game Boy , its design came at a cost of battery life : whereas the Game Boy could run for more than 30 hours on four AA batteries , the Game Gear required six AA batteries and could only run for three to five hours . With its quick launch in Japan , the handheld sold 40~@,@~000 units in its first two days , 90~@,@~000 within a month , and the number of back orders for the system was over 600~@,@~000 . According to Sega of America marketing director Robert Botch , " there is clearly a need for a quality portable system that provides features other systems have failed to deliver . This means easy @-@~00 to @-@~view , full @-@~colour graphics and exciting quality games that appeal to all ages . "

= = = Release and marketing = = =

Before the Game Gear 's launch in 1990, Sega had had success marketing its 16 @-@ bit home

console, the Genesis, by advertising it as a " more mature " option for gamers. In keeping with this approach, Sega positioned the Game Gear as a " grown @-@ up " option compared to the Game Boy. While Sega 's marketing in Japan did not take this perspective, instead opting for advertisements with Japanese women featuring the handheld, Sega 's worldwide advertising prominently positioned the Game Gear as the " cooler " console than the Game Boy.

In North America , marketing for the Game Gear included side @-@ by @-@ side comparisons of Sega 's new handheld with the Game Boy , and likened Game Boy players to the obese and uneducated . One Sega advertisement featured the quote , " If you were color blind and had an IQ of less than 12 , then you wouldn 't mind which portable you had . " Such advertising drew fire from Nintendo , who sought to have protests organized against Sega for insulting disabled persons . Sega responded with a statement from Sega of America president Tom Kalinske saying that Nintendo " should spend more time improving their products and marketing rather than working on behind @-@ the @-@ scenes coercive activities . " Ultimately , this debate would have little impact on sales for the Game Gear .

Europe and Australia were the last regions to receive the Game Gear . Due to the delays in receiving the new handheld , some importers paid as much as £ 200 in order to have the new system . Upon the Game Gear 's release in Europe , video game distributor Virgin Mastertronic unveiled the price of the Game Gear as £ 99 @.@ 99 , positioning it as being more expensive than the Game Boy , but less expensive than the Atari Lynx , which was also a full @-@ color system . Marketing in the United Kingdom included the use of the slogan , " To be this good takes Sega " , and also included advertisements with a biker with a Game Gear .

= = = Decline = = =

Support for the Game Gear by Sega was drastically hurt by its focus on its home console systems. In addition to the success of the Genesis, Sega was also supporting two peripherals for its home system, the Sega CD and the 32X, as well as developing its new 32 @-@ bit system, the Sega Saturn. Despite selling 10 @.@ 62 million units by March 1996, the Game Gear was never able to match the success of its main rival, the Game Boy, which sold over ten times that number. The system 's late sales were further hurt by Nintendo 's release of the Game Boy Pocket, a smaller version of the Game Boy which could run on two AAA batteries.

Plans for a 16 @-@ bit successor to the Game Gear were made to bring Sega 's handheld gaming into the fifth generation of video games , but a new handheld system never materialized for Sega , leaving only the Genesis Nomad , a portable version of the Genesis , to take its place . Though the Nomad had been released in 1995 , Sega did not officially end support for the Game Gear until 1996 in Japan , and 1997 worldwide .

Though the system was no longer supported by Sega in 2000, third @-@ party developer Majesco released a version of the Game Gear at US \$ 30, with games retailing at US \$ 15. New games were released, such as a port of Super Battletank. This version was also compatible with all previous Game Gear games, but was incompatible with the TV Tuner and some Master System converters. Over ten years later, on March 2, 2011, Nintendo announced that their 3DS Virtual Console service on the Nintendo eShop would feature games from Game Gear.

= = Technical specifications = =

A handheld game console , the Game Gear was designed to be played while being held horizontally . The console contains an 8 @-@ bit 3.5MHz Zilog Z80 chip for a central processing unit , the same as the Master System . Its screen was 3 @.@ 2 square inches in size , and is able to display up to 32 colors at a time from a total palette of 4096 colors , at a display resolution of 160 x 144 pixels , . The screen is backlit in order to allow gamers to play in low @-@ lighting situations . Powered by 6 AA batteries , the Game Gear has an approximate battery life of 3 to 5 hours . In order to lengthen this duration and to save money for consumers , Sega also released two types of external rechargeable battery packs for the Game Gear . The system contains 8kB of RAM and an

additional 16kB of video RAM . Audio is supplied by the Texas Instruments SN76489 PSG , which was also used in the Master System . However , unlike the Master System , stereo sound is able to be supplied through an output for headphones . Physically , the Game Gear measures 209mm across , 111mm high , and 37mm deep .

Several accessories were created for the Game Gear during its lifespan . A TV Tuner accessory plugged into the system 's cartridge slot , and allowed one to watch TV on the Game Gear 's screen . Released at \$ 105 @.@ 88 (\$ 186 in 2016) , the add @-@ on was expensive but unique for collectors and contributed to the system 's popularity . Another accessory , the " Super Wide Gear " , was an accessory that magnified the Game Gear screen to compensate for its relatively small size . Also released was an adaptor (known as the Game Gear Car Adaptor) that plugged into cars or cigarette lighters to power the system while traveling , and the " Gear @-@ to @-@ Gear Cable " , an accessory that established a data connection between two Game Gear systems using the same multiplayer game and let users play against each other .

Over the course of its lifespan , the Game Gear also received a number of variations . Later releases included several different colors for the console , including a blue " sports " variation released in North America bundled with World Series Baseball ' 95 or The Lion King . A white version was also released , sold in a bundle with a TV tuner . Other versions included a red Coca @-@ Cola themed unit , bundled with the game Coca @-@ Cola Kid , and the Kids Gear , a Japan @-@ only variation targeted toward children .

= = Game library = =

Over 300 games were released for the Game Gear , although at the time of the console 's launch , there were only six software titles available . Prices for game cartridges initially ranged from \$ 24 @ .@ 99 to \$ 29 @ .@ 99 each . The casings were molded black plastic with a rounded front to aid in removal . Some titles for the system included Sonic the Hedgehog , The GG Shinobi , Space Harrier , and Land of Illusion Starring Mickey Mouse , which was considered the best game for the system by GamesRadar . Later titles took advantage of the success of the Genesis , Sega 's 16 @ -@ bit video game console , with games released from franchises originally released on the Genesis . A large part of the Game Gear 's library consists of Master System ports . Because of the landscape orientation of the Game Gear 's screen and the similarities in hardware between the handheld console and the Master System , it was easy for developers to port Master System games to the Game Gear .

Due to Nintendo 's licensing practices during the lifespan of the Game Gear , few third @-@ party developers were available to create games for Sega 's system . This was a contributing factor to the large number of Master System ports for the Game Gear . Likewise , because of this , the Game Gear library contained many games that were not available on other handhelds , pulling sales away from the Atari Lynx and NEC TurboExpress and helping to establish the Game Gear 's position in the market . While the Game Gear 's library consisted of over 300 titles , however , the Game Boy 's library contained over 1000 individual games .

Several Game Gear titles were released on the Nintendo 3DS 's Virtual Console service on the Nintendo eShop . The emulator for the Virtual Console releases was handled by M2 .

= = Reception = =

Game Gear surpassed the Atari Lynx and NEC TurboExpress , but lagged far behind the Game Boy in the handheld marketplace . Retrospective reception to the Game Gear is mixed . In 2008 , GamePro listed the Game Gear as 10th on their list of the " 10 Worst @-@ Selling Handhelds of All Time " and criticized aspects of the implementation of its technology , but also stated that the Game Gear could be considered a success for having nearly 11 million units sold . According to GamePro reviewer Blake Snow , " Unlike the Game Boy , the Game Gear rocked the landscape holding position , making it less cramped for human beings with two hands to hold . And even though the Game Gear could be considered a success , its bulky frame , relative high price , constant

consumption of AA batteries , and a lack of appealing games ultimately kept Sega from releasing a true successor . "

GamesRadar offered some praise for the system and its library, stating, "With its 8 @-@ bit processor and bright color screen, it was basically the Sega Master System in your hands. How many batteries did we suck dry playing Sonic, Madden and Road Rash on the bus or in the car, or in the dark when we were supposed to be sleeping? You couldn't do that on a Game Boy! " By contrast, IGN reviewer Levi Buchanan noted the Game Gear 's biggest fault was its game library when compared to the Game Boy, stating that "the software was completely lacking compared to its chief rival, which was bathed in quality games. It didn't matter that the Game Gear was more powerful . The color screen did not reverse any fortunes . Content and innovation beat out technology, a formula that Nintendo is using right now with the continued ascendance of the DS and Wii . " Buchanan later went on to praise some parts of the Game Gear 's library , however , stating "Some of those Master System tweaks were very good games, and fun is resilient against time . " Retro Gamer praised Sega 's accomplishment in surviving against the competition of Nintendo in the handheld console market with the Game Gear, noting that " for all the handhelds that have gone up against the might of Nintendo and ultimately lost out, Sega 's Game Gear managed to last the longest, only outdone in sales by the Sony PSP. For its fans, it will remain a piece of classic gaming hardware whose legacy lives on forever . "