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# **Nintendo Wii**

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## **Introduction**

Wii. Is it a milestone or a stepping stone in the realm of gaming technology? Creating the Nintendo Wii enhanced gaming experiences for many users. Many complex devices have been made to collaborate with the Wii. A few of them are the Wii Fit, Mii characters, the Wii controller (or Wii-mote), and a new addition to the Wii-mote, the Wii Motion Plus.

### **Wii Fit**

The Wii Fit is an amazing video game and controller, which is called the balance board, with all the different technologies it uses. To begin with, it uses multiple sensors to measure your weight and body mass index (BMI). To send information to the Wii console it uses Bluetooth technology. The Wii Fit is considered to be a measuring device, but it could also be used to control something other than your Mii character.

Using multiple sensors the Wii Fit can measure your weight. It can also calculate your BMI judging by the height you put in when you begin. Those sensors are also able to judge tiny shifts in movement that can help you roll balls into holes, in one of the many balance games. Also, when doing yoga it measures your center of balance and the stiller your center of balance is, the better score you get. The sensors are also able to tell how hard you are leaning and in what direction so you can pass through flags in a ski or snowboard slalom.

To talk to the Wii console, the Wii Fit uses Bluetooth technology. Whereas the Wii can only have four controllers, Bluetooth technology is able to have up to seven external devices. All the wireless connections that the Wii uses, including the Wii fit and the controllers use Bluetooth technology. Bluetooth technology enables the Wii to have accurate sensors on where the remote points. Bluetooth enables it to have the same reaction time as if it were plugged into the console.

The Wii Fit can also be used for many other useful things. It is used as a measuring device in weight placement. When you are doing push-ups, it is like someone is watching you from inside your TV because the Wii fit measures weight placement very effectively. It may be useful as a control device as well if you are very good with your balance—it could be used like the Wii remote. Some people also want to use the Wii Fit as a weight loss device. It is possible that it could be used for weight loss, but it is not very effective.

Even though the Wii Fit can be used for many useful things, it can be better. It uses wireless technology to talk to the Wii console, specifically Bluetooth. To measure your BMI and weight it uses multiple sensors. Lastly, with some improvements the Wii Fit could be used as control device. It is a way to lose weight; although it is not very effective, it is possible. The Wii Fit is a very versatile invention and can be used for many different applications.

## **Wii Remote**

The Wii remote and the console take a lot of technology to work. You don't normally think about it while you are playing your Wii, but just steering a car or editing your Mii requires a lot of technology to present the outcome. The creators of the Wii used so much technology and packed it into such a small machine. The Wii console is 8.5" long and 6" wide, and they managed to get an enormous amount of memory into it.

The Wii remote's look is based on a skinny TV remote, otherwise known as the Wii-mote. The Wii remote communicates with the Wii console, which holds the game and all of the Wii's internal memory in a variety of different ways. The most common way is through Bluetooth technology, which is the same technology that a cell phone head set uses. It also uses infrared technology, the same technology that helps a TV communicate with its remote. The remote uses an image sensor on the front of the remote that communicates with the sensor bar, which needs to be on top, below, or near the TV. The image sensor helps point and click at things on the TV screen, such as when editing a Mii or ending a game. The image sensor also uses Bluetooth technology. Inside the Wii remote, one of the key features is the "rumble pack". This vibrates the Wii-mote based on information the console detects from the game and then sends it to the remote. One of the most talked about features on the Wii is its relative motion. This is a very precise feature on the Wii. This is used in certain games like Mario Kart to steer a car or to move a character up and down. Another important feature is micro-electro-mechanical systems (MEMS). This is the technology that activates airbags in vehicles. When MEM elements are moved, their electrical field changes. Since the chip in the console is so sensitive, it senses the small change in the field and reacts.

The Wii remote has the axes of acceleration: up and down, left and right, and forward and backwards. These are key elements in certain games like Mario Kart and Wii Fit. The Wii remote

also has a lot of features on its body. It has: a power button, + control pad, A button, B button, - button, + button, home button and 1 and 2 buttons. These are all used in different ways. There is also a “nun chuck” attachment, which is named for its resemblance of the martial arts weapon. It has a variety of buttons and hooks up to the Wii-mote to help with games where you have to use both hands. It has: a control stick, C button, and Z button. The console has a variety of features. It can take both Nintendo Wii games and Game Cube games. It also has 512 megabytes of internal flash memory. You can also insert a SD card to increase internal memory. Another feature is communication with Nintendo DS's. Up to four Wii remotes can be connected to the console at once and there is a maximum of being ten feet away for the Bluetooth to work.

## **The Wii Motion Plus**

There are many game systems that people all over the world enjoy playing, like the Wii. The Wii's technology is advanced, and in 2009, a Wii remote add on was created called the Wii Motion Plus. This accessory allows the controller to more accurately capture complex action. The Wii Motion Plus can do many more wondrous things, but it has its disadvantages.

Many people know what the Wii controller is and they assume the Wii Motion Plus is the same, but it's not. It is way more enhanced. Basically, it is an expansion device that attaches to your Wii controller. The idea of the Wii Motion Plus was thought of soon after the Wii remote design was completed. The Wii Motion Plus has a high shock tolerance so that you don't get shocked when you are using it. It can capture complex action because it incorporates a 3-axis, “turning fork”, angular rate sensor which can determine rotational motion. Without that, it would be just like the controller. In 2009, about 374,000 Wii Motion Plus units were sold. In November 2009, black Wii Motion Pluses were released to coincide with the black Wii controller.

The Wii Motion Plus can accomplish many impressive things. It can capture more complex movements than possible with the Wii remote alone. It can also more accurately trace motions in 3-D space. The Wii Motion Plus elevates Wii game play to a level of realism that isn't even imaginable. What the Wii Motion Plus is really doing is bringing every twist of the wrist or turn of the body to life. Unfortunately, the device can be damaged. If you clutch or swing the Wii remote by the Wii Motion Plus accessory it can severely harm it.

The Wii Motion Plus has many terrific advantages, but some inconvenient disadvantages. Each Wii Motion Plus includes a longer jacket to accommodate the length. Even when the Wii Motion Plus is attached to the controller, the nunchuck or another controller can be used at the same time. A pass-through external extension connector makes this possible. Unfortunately, the Wii Motion Plus doesn't work with all Wii games, but on the bright side, it can be attached to the controller when playing games that don't support it without causing any problems. Some games that support the Wii Motion Plus are Kidz Sports, Crazy Mini Golf, and SpongeBob's Truth or Square. The Wii Motion Plus must be taken off when using certain accessories such as the Wii wheel, Wii gun, and Wii zapper. People are thinking about making extended accessories to support the Wii Motion Plus.

When the Wii was created many people were astounded by its technology, but now an even better technical Wii remote add-on has been invented. The Wii Motion Plus is a cube-like

attachment that helps enhance the Wii controller's movements. Even though it has some disadvantages, the Wii Motion Plus has been successful in proving its great qualities. Technology will continue to grow, but the Wii Motion Plus is technology's climax so far.

## **Mii Characters**

What are Miis? A Mii is an avatar that is an extension of a player. You can make them to look like you or a celebrity. You can make funny ones and even animals. All it takes is a little imagination. Miis are 3D characters that show up in the games you play as your avatar, your opponent, an audience member or a citizen of a town. You can send up to ten Miis to your Wii-mote and take your remote with your Miis to a friend's house to use them there also. The Mii channel is one of the many channels that the Wii features, including the internet, weather, shopping and photo channels. There is also a Mii message board that you can attach your Mii to and write a message for people around the world to see.

If you have a Wii, creating a Mii is quite simple. The first step to creating a Mii is to turn on the Wii and select the Mii Channel from the Wii menu. You can either start from scratch or choose a look-alike Mii if you want to design it quickly. The next step is to choose the gender of your Mii and modify it. You can change the Mii's face shape, hair color and skin tone. Once you are done with that, you can "fine-tune" your Mii. When you are "fine-tuning," you are allowed to change its eyes, eyebrows, nose, mouth, and even add glasses and accessories. Finally, you can change its height and size however you want. The next step is to create a profile for your Mii.

When you are creating a profile for your Mii, you only need to include a few details. The nickname you give to your Mii is how you can identify the Miis after they have been sent out to the Mii Plaza. You can also include the Mii's birthday, gender, and Mii creator. The next two facts you have to include are the Mii's favorite color and if it is a favorite. If you were to choose blue as your Mii's favorite color, it will always wear the color blue. If you want your Mii to be a favorite, you just simply have to click the favorite box and a red crown will automatically show up. But remember, you can only have ten Miis be a favorite. Creating a Mii is really neat because it can resemble you, a family member, or just a random person.

## **Conclusion**

Some people say that making the Wii was the next great step in gaming history. It is a variety of different forms of technology packed together in a small box. You can play Wii games such as Wii fit or Wii sports and make a Mii to resemble yourself. Many devices that enhance the Wii's technology are the Wii-mote, the Wii Motion Plus, which connects to the Wii-mote, Miis that the Wii-mote creates, and the Wii Fit game and board. Makers of the Wii say that you don't just play it, you experience it.

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