A/V Tips & Tricks
Troubleshooting your programming set-up

Back in the day, technical difficulties with cartridge games were resolved by high-tech manoeuvres consisting of blowing into the system, blowing into the cartridge, banging the cartridge on your knee, and flipping between channel 3 and channel 4 on the television. With today's systems, troubleshooting is slightly more complex. This list is not exhaustive. There are numerous resources online as well as an entire chapter in Eli Neiburger's book *Gamers... in the Library?!* dedicated to resolving A/V problems. Don't forget that games and systems often have a toll-free line and may be able to provide suggestions.

- Try to set up the day prior to your event, during business hours in case you need to run out to buy anything.
- Run a test that approximates the conditions of your event as closely as possible; for example, set up the *Rock Band* equipment and play through a song. Go through the entire process that players would be expected to complete during your event. For example, in *Mario Kart Wii*, you choose your character, your kart, and your driving mode (manual or automatic) prior to choosing your race track. When new players rotate in, will you allow them to go back to choose new characters and karts?
- If you are borrowing a system, find out how it is currently set up at home and make sure you get all the cables. For example, if you only have a standard definition TV at your library but you are borrowing a Wii from someone who has an HDTV, make sure they lend you the composite cables that came with the system originally.

At the bare minimum, this is what you need in order to play a console game on a television:

- a console, connected to a power source
- a game, although the current generation systems will start and display a 'home' screen without a game inserted
- a controller (charged, plugged in, or with batteries)
- a TV or other screen with inputs, which is plugged in to a power source
- a connection between the console and the television

Some setups also have:

- peripheral controllers such as drums, dance pads, microphones
- additional audio equipment such as an amplifier and extra speakers
- a projector or non-television screen

As you can imagine, something could potentially go wrong with any element (or multiple elements) of this system. If you are encountering an error, you should work through these areas of the setup systematically, eliminating potential sources of the problem, or working on the area where you suspect the problem is.

The console

If your console or its power supply is broken, you will need to procure a new one. Make sure it's not broken by plugging it into different outlets in different rooms, and the classic making sure it is turned on. The PS3 has a power switch in the back in addition to the "on" button on the front. The Wii and Xbox 360 only have one 'on' button, located on the front of each console. Some consoles will give you an error message, or otherwise communicate that there is a serious problem, such as the red ring of death that appears on the front of the 360.

Today's consoles are more like limited-use computers, and as such have things like hard drives. If your hard drive is filling up, you won't be able to install a new game, so make sure you delete old save files or demos that are no longer needed. Today's systems support memory cards or external hard drives, so with a little bit of shuffling there is no reason to run out of space.

The game

If you suspect that your disc is merely scratched or otherwise damaged, try a different one. If you need to play that particular game, borrow or rent a copy, or bring your damaged disc in for repair - most video stores should have the equipment to help you out. If you have been moving data around between hard drives and memory cards, there could be confusion over where the save files are - try moving them back to the system's main memory.

Controller issues

There are two main issues with controllers: power, and synchronization. In the days of wired controllers, they drew their power directly from the system, and also communicated your **button mashing** through the wire. Now that players are accustomed to being able to sit however far away they want from the console, communication and power have gotten a little more complicated. Have a supply of fresh double-A batteries handy, and make sure you have the cords necessary to connect the PS3 controllers for recharging. You should be able to check each controller's battery levels through options on the console.

Synchronization is handled differently with each console. The controller needs to be able to communicate with the console, but you may have borrowed controllers from someone else - these are not yet synchronized to your system (and don't forget to label them so that you return the right ones to the right people).

On the Wii, synchronization can be accomplished by pressing the red "Sync" button on the front of the console (found under the SD card slot cover), and the small red button on the Wii remote (found under the battery cover). This must be done for each remote. Synchronizing controllers in this way stores the information in the controller, so that they will be associated with that individual console until they are synchronized to a new console. A "one-time"

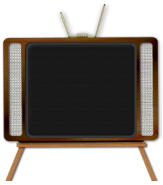
synchronization can also be done by pressing the "Home" button on the Wii remote, which allows you to choose "Wii Remote Settings," and also displays the battery levels for each controller.

The 360 controllers have a similar process. Make sure the controller is on first by pressing the big "X" button in the middle. Then, press the "connect" button on the 360, which should cause green lights to flash around the X button on your controller. When you press the small "connect" button on the controller, located between the shoulder buttons, the green light should stop flashing.

On the PS3, controllers can by synced with a system by hooking them up via the USB cable and pressing the small, clear PS button.

If buttons or functions on your controller are truly broken - for example, I dropped my PS3 *Rock Band* guitar one too many times, and it no longer recognizes my attempts to go into 'overdrive' by lifting the guitar - there are often workarounds. I can just press select on the guitar to activate overdrive, which is not as much fun but still works. Many games also allow you to 're-map' the buttons, so if the "X" button on your PS3 controller, usually used to confirm a selection, has broken, you can assign it to a button that still works. Of course, this means you will lose the function of whatever you assign to the broken "X" button, but just choose something non-essential.

The TV



If your TV is malfunctioning, you'll probably know, or at least be able to test it using other media. Make sure it is plugged in and free of any unnecessary inputs. If it came with a remote, it is a good idea to have it on hand since you may need to select the input source from a menu. While most TVs have some buttons for navigating menus located in a front panel (often hidden), it can be frustrating to cycle through complex hierarchies with these buttons, especially if you race by the option you need and find that there is no "back" button.

If your TV has broken, or you booked one and it didn't show up, it might be possible to use a different screen. Some computer monitors have inputs for S-video or component cables. In that case, you will be able to hook up your gaming systems directly to a computer monitor. Or, if you have a DVD player hooked up to a digital projector, many of these players have a space for composite cable inputs (don't be fooled by the outputs, which won't allow your console to communicate with the display – slots should be marked with an "in" or "out"). If you have such a set up, you should be using the large screen instead of the TV anyway!

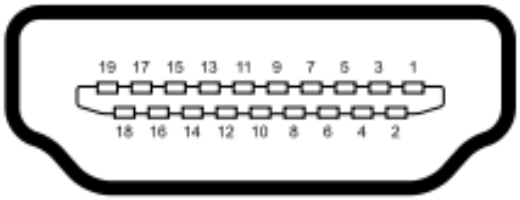
One difficulty with the Wii is that it has a Sensor Bar that emits infrared light, which the sensor in the Wii remotes pick up. The remotes then communicate with the console using Bluetooth technology to convey their position and direction. If your remote is not in range of the Sensor Bar (approximately 5m), it won't receive the infrared signals. The Sensor Bar that comes with the console is wired, which limits its placement and thus your entire set up (third-party wireless sensor bars can be purchased). The bar is designed to be placed over or under the screen. This is not a problem with most televisions, but makes setup difficult in some circumstances. Your input device – such as a DVD player that communicates with a digital projector – must be close enough to the screen you are playing on for the Sensor Bar (which is connected to the Wii) to be placed near the screen.

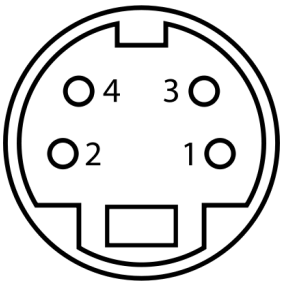
The connection between the console and the TV

In many ways, this is the most complicated aspect of the setup, and can depend on the cables you have connecting the two devices, as well as settings on both the console and the TV. First, a quick introduction to the types of cables that connect consoles and televisions.

HDMI

Stands for High-Definition Multimedia Interface. It transmits audio and video in a single cable and is currently the height of cable technology. If your TV has HDMI inputs, you may want to invest in HDMI cables for your systems; however, the Wii does not have an HDMI output. The PS3 and 360 both support HDMI.





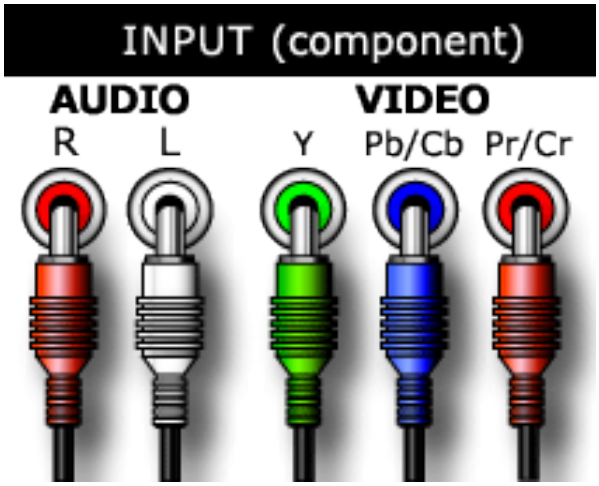
S-Video

Stands for Separate Video. This cable does not carry audio data, only video, and thus the cable splits at the end to include the audio channels. This delivers an upgrade in video quality from the more-common composite cable, but is not as good as the component cable. All three systems have outputs and specialized cables for S-video.

To the left is the entire S-video cable for the Wii: the large end goes in the console; two of long jacks are audio (and one is a composite video cable just in case); the last, round jack is the S-video end itself.

Component

Currently the highest quality output cable for the Wii, component cables typically have five plugs at the end: two audio channels, and three video signals. The video plugs are usually red, green, and blue, compared to the yellow colour of the composite video cable. Audio channels are represented by the same colours in both cables: red and white. To see if your TV has component inputs, check for small circles rimmed with green, blue, and red.



Composite

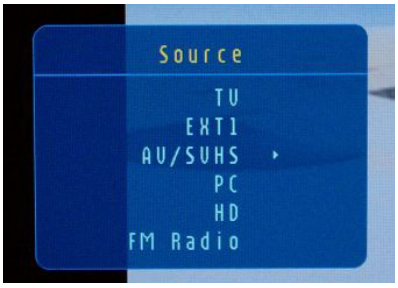
This type of cable has been around for many years and delivers a fairly low-quality video signal compared to the other cables. All the information (the luminance and chrominance of the picture) is delivered through a single pin. However, because of its age, composite outputs and inputs are also very common and it's a safe bet if you travel with your system between branches or venues that the television at your destination will have a composite cable input. Many devices come with composite cables, including digital cameras (so that they can be hooked up to a television). They consists of one yellow-ended cable (the video) and the two red and white audio cables. The official Xbox 360 component cable package includes a composite cable for use with standard-definition TVs (the two audio cables are shared).

Selecting your source

Once you have determined which inputs your television or other screen accepts, and if upgrading to a higher-quality cable is in your budget, it's time to learn how to switch between inputs.

It's important to either find your TV's original remote, or get a universal remote, since this will make changing between inputs easier, though this should also be possible using buttons located on the TV. Check out the controls in the front panel, sometimes hidden behind a flap, if you cannot find a remote.

Older remotes simply had a "TV/VCR" button, but now you will typically see a "source" or "input" button. Pressing it either results in a choice of inputs appearing on screen, or it automatically switches to the next input in the sequence.



You may have to hit the button multiple times to switch between "Video 1," "Video 2," etc., or scroll through a list of "Component 1," "Component 2," "HDMI 1," etc. Make sure your console is turned on before you switch the selected source; that way, once you pick the right source you should see your console's starting screen right away.