How do I connect a VCR to a Flat Screen TV

You may still have many video tapes that you like to play but find it hard to connect a VCR to your new flat screen TV. Often this is because you can’t find the right connections on the new TV. This article will explain the different options on how to connect a VCR to a flat screen TV, even if you can’t find the yellow socket.

Basically you need to connect from the “line out” of the VCR to “AV in” of the TV. This needs to be done for both the video and for the audio. Some VCRs have one audio out socket (mono) and some have two audio out sockets (stereo) – we will look at stereo first, and look at the differences for mono later in this article.

Connect a VCR with the Yellow, Red and White Leads

To connect a VCR to most flat screen TVs, you will need a cable with these yellow, red and white connectors. For non-European VCRs, you will need a cable with these plugs at each end. For European VCRs, you may need a SCART plug at one end, and these yellow, red and white plugs at the other end to connect to the TV.

These plugs are often called RCA or Phono plugs. The yellow cable is used for the video signal, the red cable for the right audio, and the white cable for the left audio signal. Many VCRs come with these leads supplied. If you don’t have any, they should be available at most electronic or electrical stores.

The rear of the VCR

This photo shows the standard connectors on most (stereo) VCRs. If you look closely, on the right hand side are the “line out” sockets (the left hand side is for “line in”, which we don’t use for connecting to a TV). The top right red socket is for the right audio out. The white middle right connector is the left audio out socket. The yellow socket at the bottom right is the video out socket.

The markings or labels on most VCRs are as hard to read as in this photo, so you may need to use a torch to see the markings clearly. Once you have found the line out sockets, it is a simple matter of connecting the yellow, red and white plugs of the connecting cable to the corresponding yellow, red and white line out sockets of the VCR.

The Rear of an Older Flat Screen TV

Older flat screen TVs are easy to connect a VCR to as they have at least one yellow “video in” socket. In this photo you can see it just below the centre of the photo, it is labelled “Video”. Below this yellow socket for video in is the corresponding white and red sockets for the left and right audio in.

Having found the yellow, red and white sockets, it is a simple matter of connecting the corresponding yellow, white and red plugs of the cable connected to the VCR to these sockets.
You may have noticed that in this photo, these sockets are in a section labelled “VIDEO 1 IN”. This normally would indicate that this is the input you need to select on the TV to watch the VCR. Most TVS require you to press “Source” or “Input” on the remote control to select the “Video 1” input signal.

Other TVs might label these inputs “AV” (short for Audio/Video).

Some older TVs might have several AV inputs, normally labelled AV 1, AV 2 etc. Many older flat screen TVs also have AV inputs on the side of the TV as well as on the rear of the TV.

My TV doesn’t have a Yellow Socket!

I get many questions from people saying they can’t find the yellow socket to connect a VCR into. Don’t worry, I have a solution. But first check the sides of your TV to make sure the designers aren’t trying to trick you by hiding the yellow, red and white sockets up one side.

Don’t worry if you can’t find a yellow socket to connect a VCR in to, as many new TVs don’t have one. Manufacturers think there is no need to supply TVs with the ability to connect a VCR through the standard (and old) yellow, red and white sockets. Instead they get you to connect to the green socket.

The Rear of a New Flat Screen TV

At the rear of many new flat screen TVs there is no yellow socket for “Video In”. But as you can see in this picture, they say you can use the green socket instead. Notice on this TV, (and most others) there is only one of the green sockets nominated as “Video in” for you to connect a VCR to.

So for this TV, you would connect the yellow lead from the VCR to the nominated green “Video in” socket. The red and white audio leads from the VCR would connect to the corresponding red and white audio sockets below the blue and red.

Be careful not to fall into the trap of connecting the red audio cable, to the other red socket labelled “Pr” – the right audio will not work if you do this.

Note that not all TVs label the video in a clearly as in this photo. Some simply put a yellow circle around the appropriate green socket. Others label this socket as “Composite Video”.

Composite Vs Component Video

You don’t need to understand this section – it is for those people who like to understand why it is possible to connect a VCR this way.

The green, blue and red sockets labelled Y, Pb and Pr in the photo above are for connecting a DVD player. These three video signals are called “Component Video”. It is the best way of connecting a DVD player if the DVD player doesn’t have HDMI. The green input from a DVD player is basically the black and white picture. The blue and red inputs are for the colour information of the picture. Then the other red and white sockets are for the right and left audio.
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The video signal from a VCR has the black and white picture and the colour information all joined together – called composite video.

Modern TVs are clever enough to know when you only have one lead connected with all the information (composite video) or separate leads (component Video). Hence they don’t need to provide a separate input for Composite only. For a more detailed explanation of component video see this [article](http://geoffthegreygeek.com/connecting-multiple-speakers-to-amplifier/), or this [article](http://geoffthegreygeek.com/connecting-multiple-speakers-to-amplifier/) to learn more about composite video.

**My VCR only has a white audio out**

Many VCRs are not stereo, they are only mono. That is, they do not output a left and right audio channel. Instead they only output one single audio channel (mono audio). Therefore, they do not have a red and white audio output (for right and left audio). They only have a white output, for the mono audio. You may remember most old TVs only had one speaker, so the VCR only needed one audio channel (mono).

To connect a VCR with only mono audio to a flat screen TV, simply go from the “audio out” socket of the VCR. That is the easy bit. How you connect to the TV will depend on the TV.

Some TVs will have sockets on the back like this picture. On the left hand side you should see the Audio right (red) and left (white) input sockets. The left socket is also labelled “MONO”. If your TV is like this, then simply connect the “mono out” from the VCR to the “mono in” of the TV. The TV should direct the sound to both (left and right) speakers of the TV.

If your TV does not have a Mono input, then you have two options:

1. You can simply connect the “mono out” from the VCR to the “Left in” on the TV. This will send the sound to the left speaker only. While you might think this is not ideal, you may be surprised that it sounds fine when sitting some distance from the TV. The red cable is not used if connecting to the TV this way – it can just hang on its own behind the VCR and TV.
2. You can use a cheap mono to stereo adapter cable. The single (black) plug is connected to the white audio out of the VCR. Then a normal red and white audio lead is connected from the adapter cable to the right (red) and left (white) audio in sockets of the TV. This will send the same mono audio to both the right and left speakers of the TV.
3. You can also use a mono to stereo adapter plug. This plugs straight into the ‘Audio Out” on the back of the VCR. Then a normal red and white audio lead is connected from the two sockets of the adapter to the right (red) and left (white) “audio in” sockets of the TV. This works exactly the same as the lead above – use whichever one is available to you.

Whichever way you connect the mono audio, you will hear the sound through the TV. Keep in mind that many video recordings were probably recorded in mono, so you are not missing much.

Don’t forget to also connect the yellow video lead from the VCR to the TV (as described above).