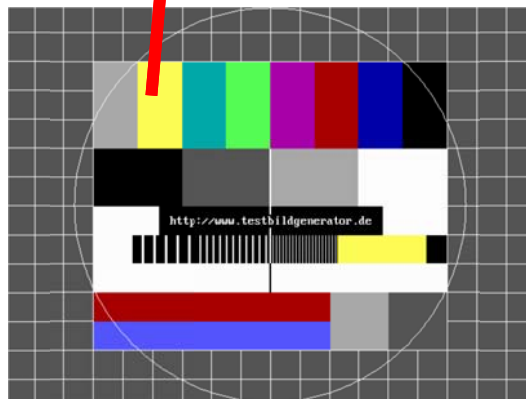
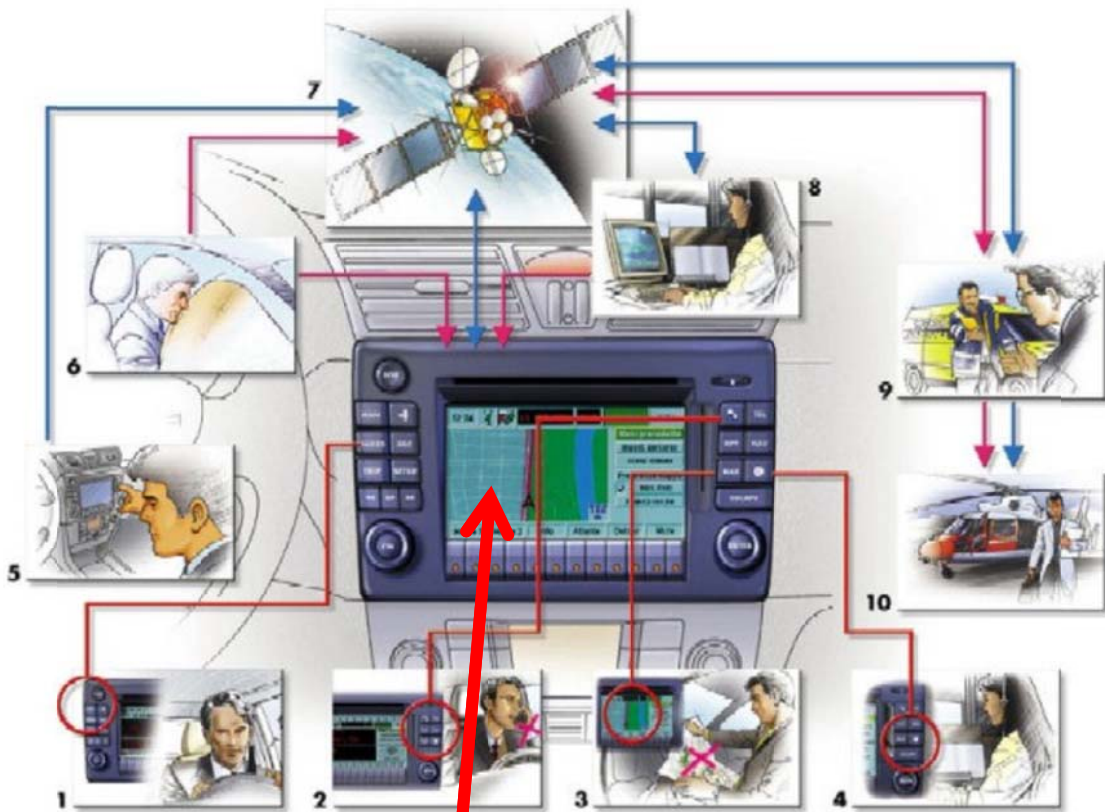


Video-in Connect nav+



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INTRODUCTION

Short Description

Many have already asked:
How do I get a video image on the display?
How do I get a Line-In?
To the Connect Nav + by Magneti Marelli.

After quite a bit of preliminary work was done, I decided to try my luck and was very happy it worked.

I have tried to explain myself the best I can while writing these instructions.

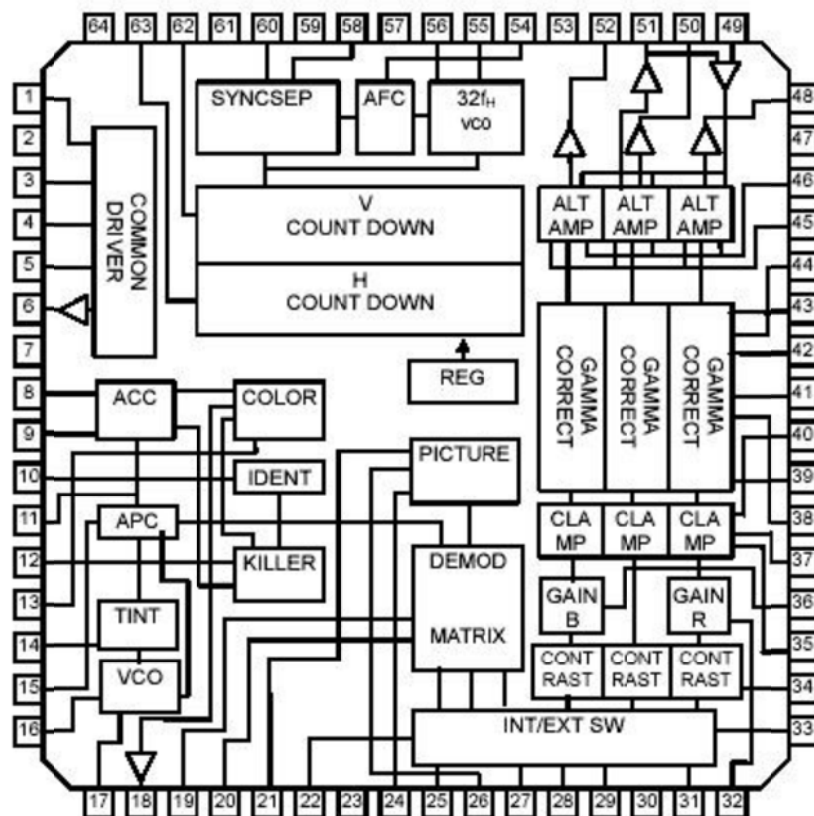
However you should know in advance, soldering to the video input of the display board is required. It is very small, I take no responsibility for any damage you cause.

I got these pictures from forums and websites to use as points of reference to the texts and drawings described below.

VIDEO INPUT

Introduction

The display unit is comprised of the TFT screen and a Control. On the control board is the "Signal Processor for Color TFT" NJW1300B.

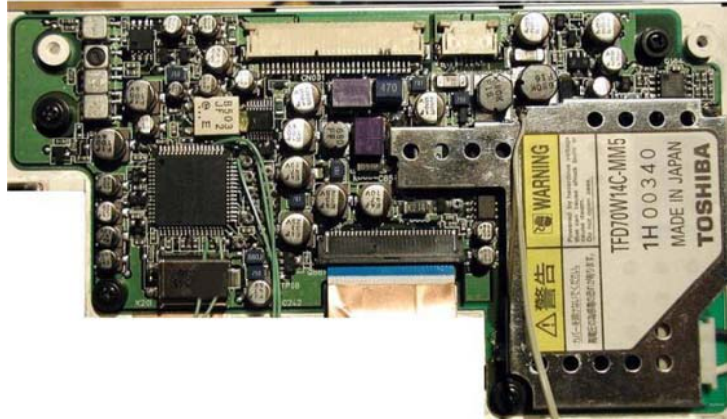


This IC has 64 pins and serves as an interface between the motherboard and Screen. The mainboard provides a RGB and a synchronization Signal to the control board and so the NJW1300B. This chip can do even more. It also has two inputs S-Video (Y / C). In this connection, we will do our Focus set.

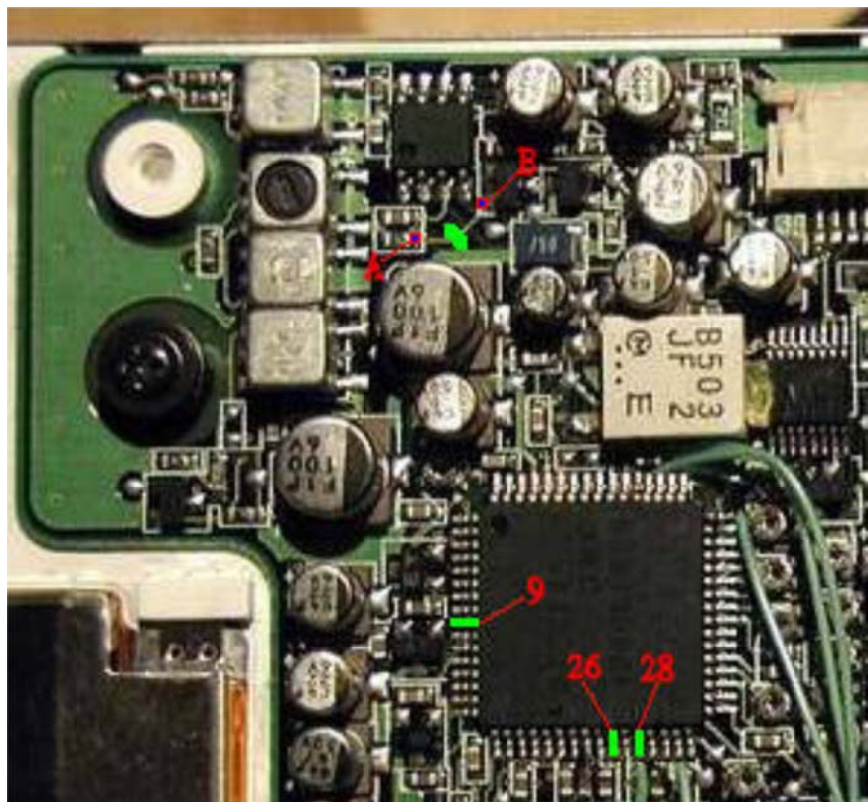
One more point to the video signal itself. The NJW1300B can still see the spread of signal PAL (50Hz) support, but the Control board only for NTSC (60Hz) designed. There are although PAL-M with the same sync frequency of 60 Hz as in NTSC, but then would be the visible image is only black and white. So should Devices (eg DVD or DVB-T) NTSC support.

Reconstruction of the display control

As I said the control board is our base. After removing you definitely need this object in front of you. (Unfortunately, I had no other picture. So please ignore the green wires)



These are the relevant pins.



Pin 9: Croma (C-IN)

Pin 26: luminace (Y-IN)

Pin 28: Switch, is standard on 5V + (switching between RGB and Y / C)

Connector A: C-Sync to 1300B

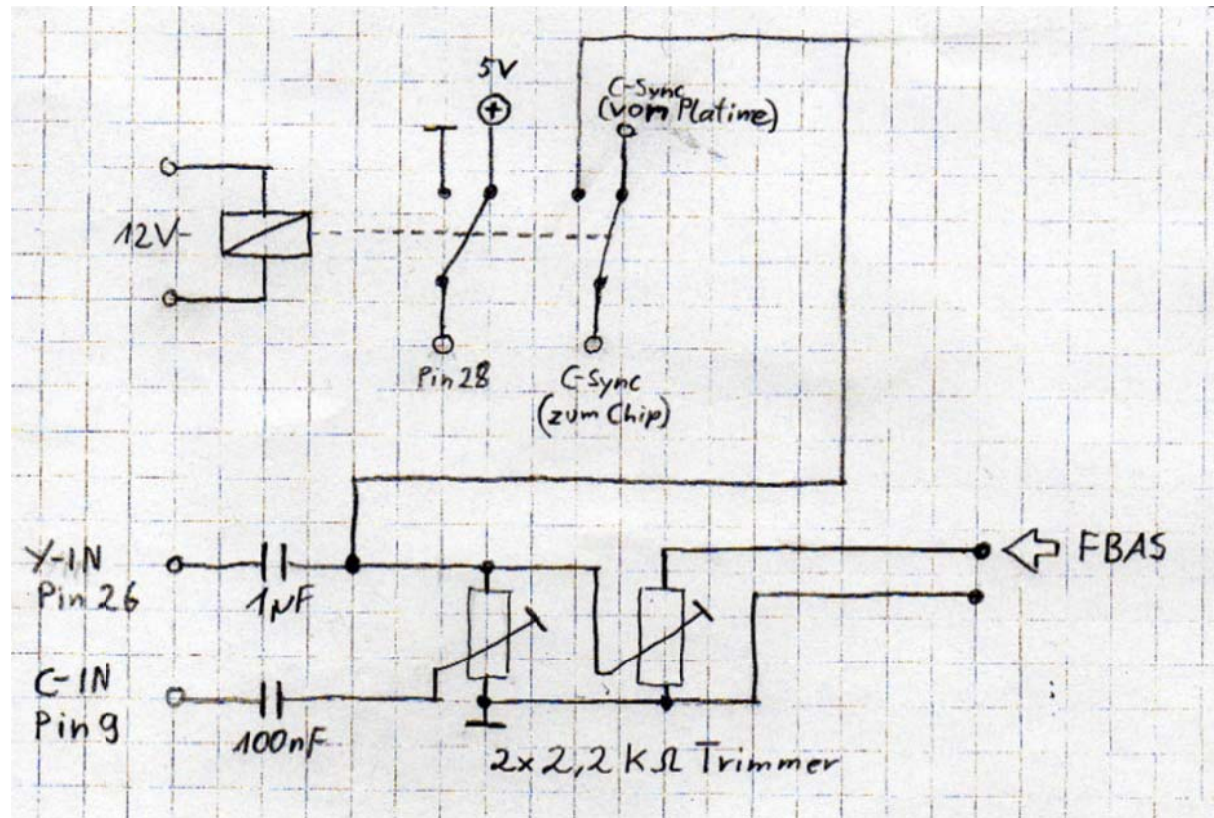
Connector B: C-Sync from the motherboard

The connections to all 5 pins should be carefully soldered using insulated 0.5 mm wire.

The connection between points A and B must be severed (see green line in the picture above).

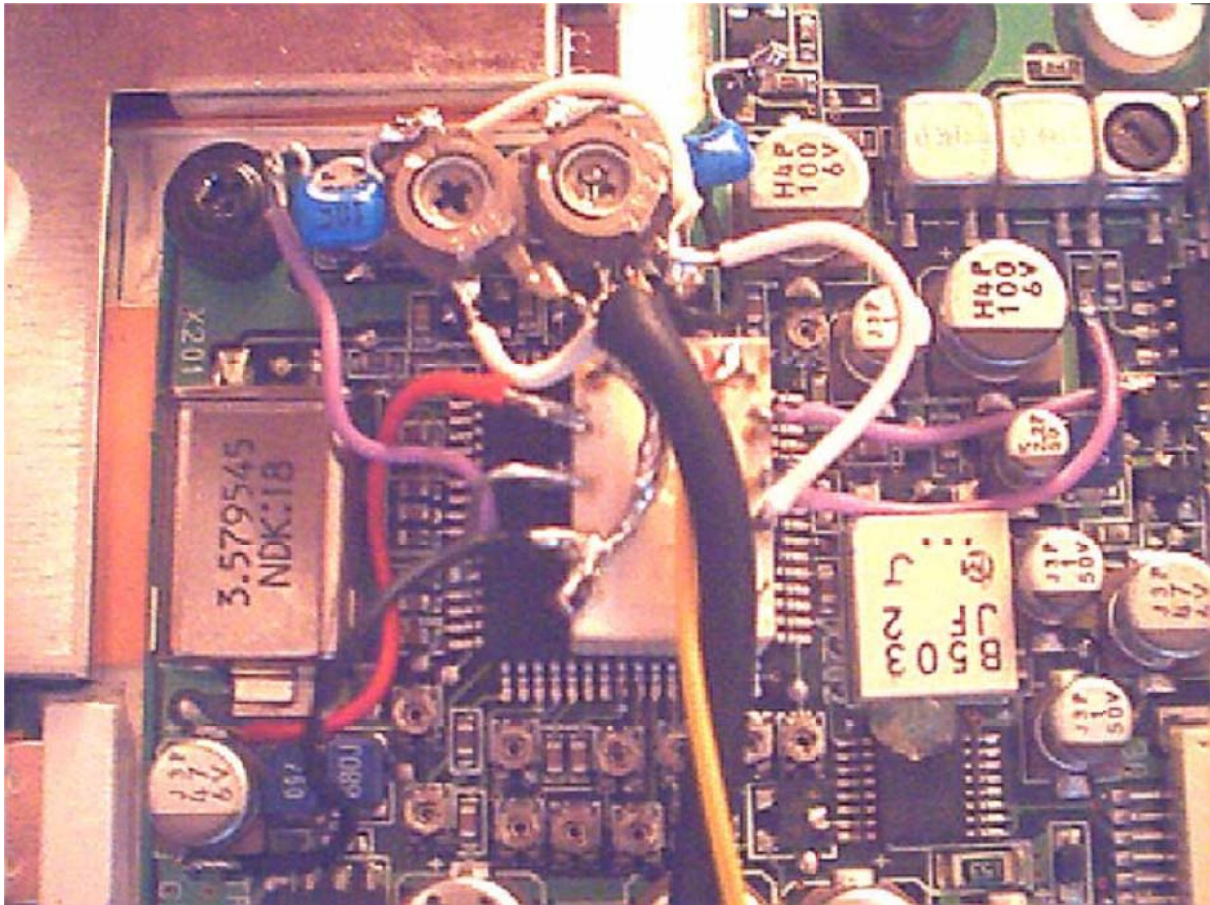
Particular attention should be paid to pins 9, 26 and 28 as errors will cause interference. Do not over heat the joints.

Once these changes have been made, it can be connected to this circuit.



On the function of control: I have chosen the value of 2.2 KW, I just had nothing better to hand. But he is perfectly adequate. Man needs this trimmer, because the level of the input signal is too high and you else to get a distorted picture. When setting both controls to turn on Mass and is only one of the trimmer slowly for the Y signal responsible for the image to black and white is visible. It would have the standing of Controller are almost in the middle. Then, to set the controls for the color (Croma) a. This must not be regulated until the mid-position should be, depending on how the image contrast Reich. The relay should be small. I'm looking for a Sub-Miniature Relay decided which is no larger than an IC. This one I have then on the Chip bonded. A great advantage of such a relay has in any case, because it granted an electrical disconnect.

The 5V + and ground I've got myself from a readily available, such as Elko you can see in the picture below.



The composite cable (thick black line) is shielded. The yellow line leads to the switch that can switch between the two modes. This both lines are now out of the display unit, by the Great Radio housing led out the back. If everything would have worked the image look something like this.



AUDIO INPUT

Introduction

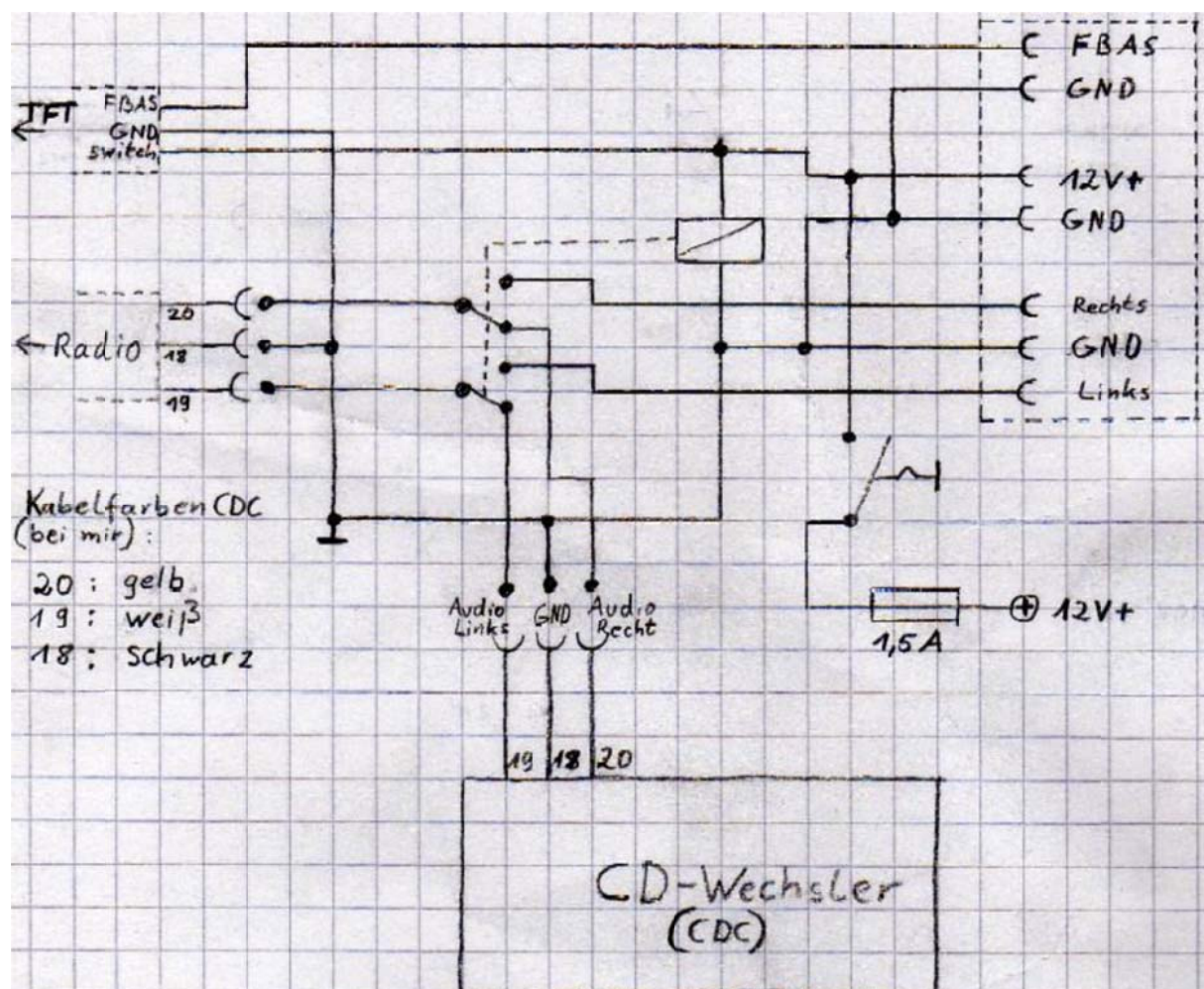
For me it was important that the messages from the Radio, GPS, Phone, etc. continue to function. So I've thought about where the audio should go and I opted for the changer since I have the CDC installed and thus the CDC button is active, this was the fastest solution.

So you can use this solution only if you have a changer installed.

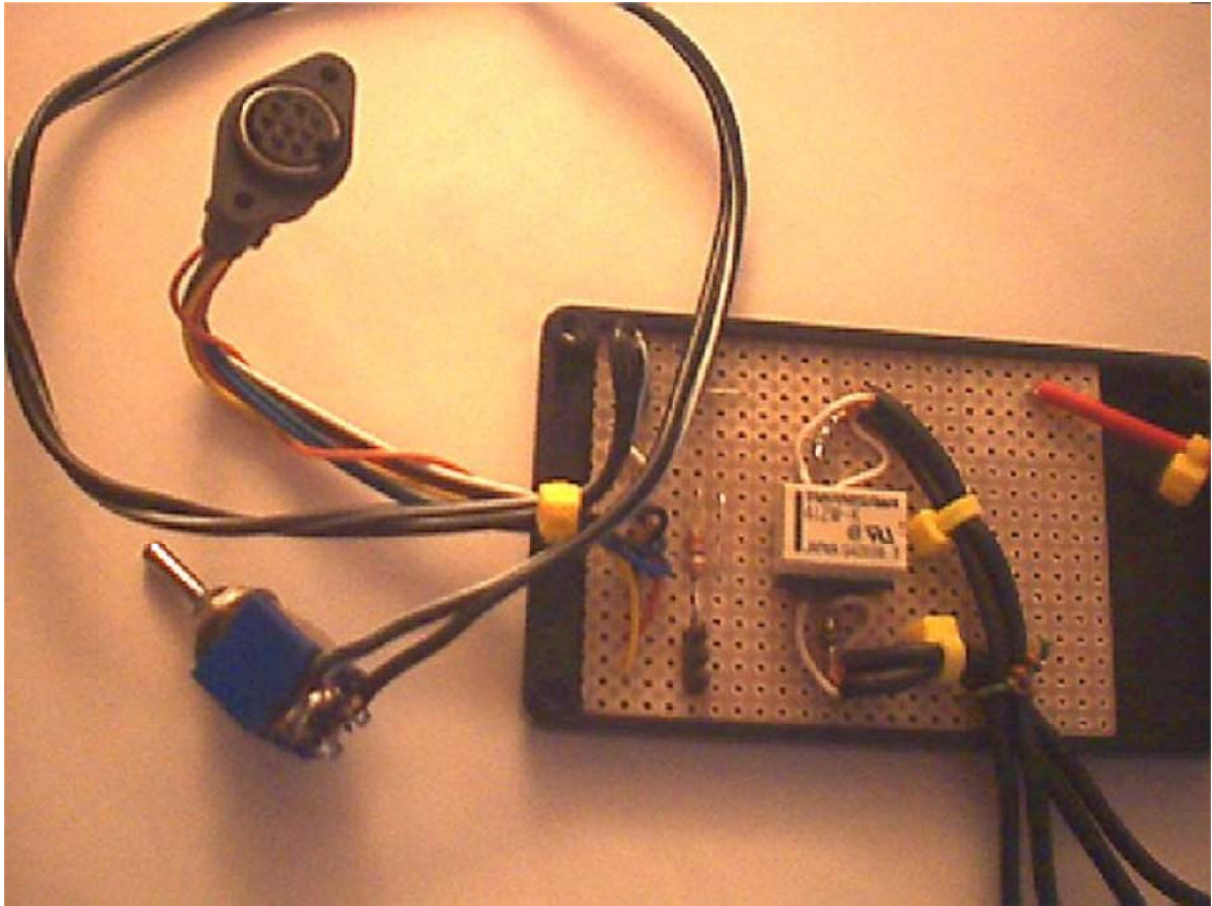
However, for video sound to be heard a CD must be in the changer and being played(on repeat).

Reconstruction of the changer

I have used sub-miniature relays as they were sufficient for my purposes. For the connection to the video device DVD DVB-T etc. I used a 8-pin Mini-Din female. This includes also a power connector instead of the cigarette lighter. 12V + of course you have to get from your electrical system. For safety, I have a 1.5A fuse with retrofitted.

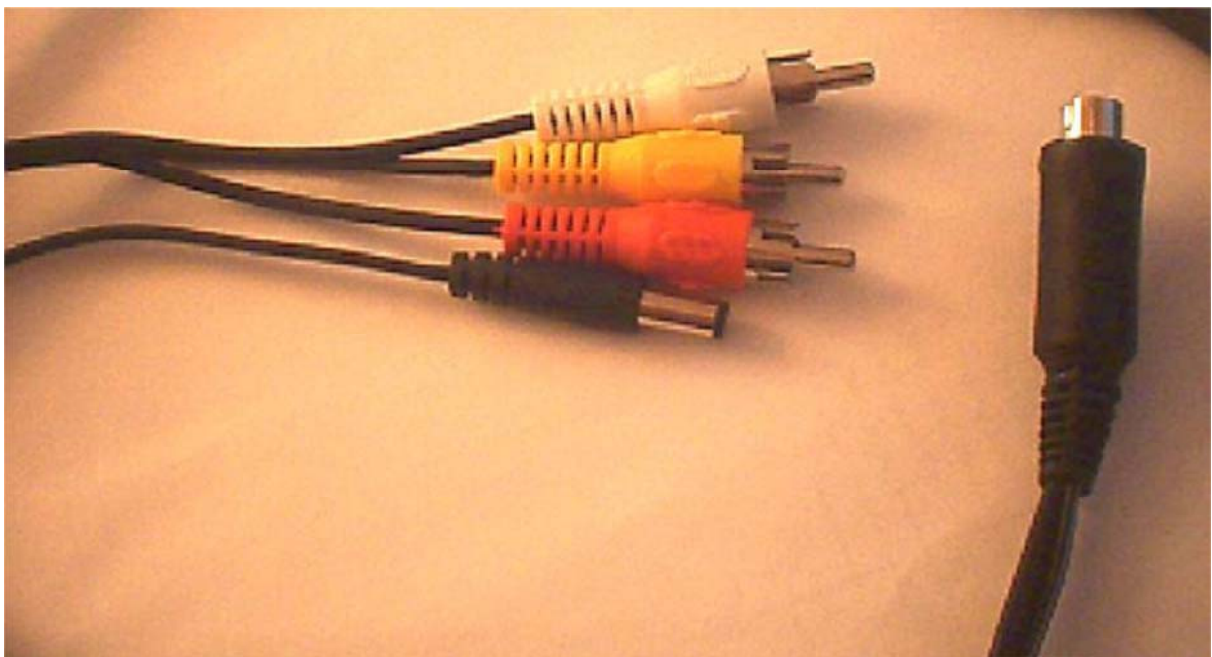


Such a circuit would look like finished:



For the Mini-Din female I had a suitable cable made.

What you can then pack when not in use in the glove compartment:



HAVE FUN!!