

The HSI and DED

As described in one of my PDF's I used a TFT screen to make a fully functional middle console. For the production of the HSI and the DED I used the two screens of a DVD player for use in a car. I think that the photo screens on the marked these days are worth opening to. They are cheap and becoming more cheaper.

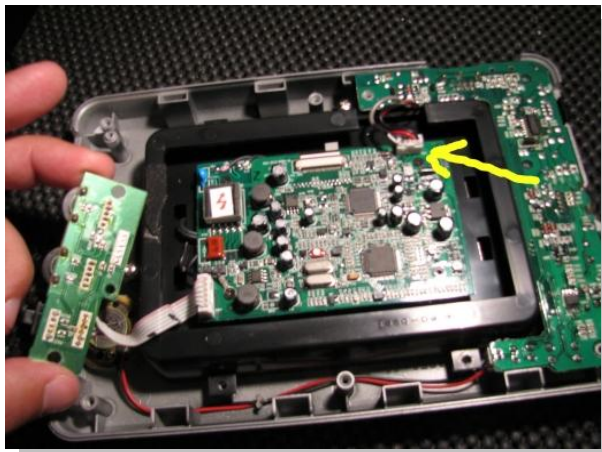
The set I used came with a plug not used often. I tried to find the pin assignment but couldn't bring the screens to live. Then after some deep breath's I decided to open the housings and strip the content to see if the solution is beneath the surface.

The screens , when used for the HSI and DED should n't be to big. I believe the ones I used were 5 inches. If to big they will not fit between the Instr panel and the fuel qly sel-panel.



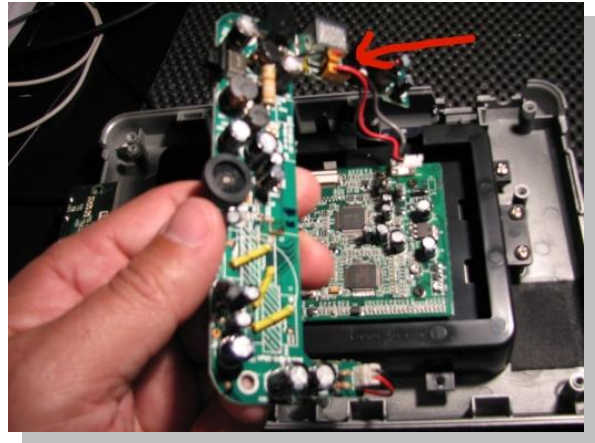
As mentioned earlier I started to open the casing.

The electronics to drive the screen are positioned on the back of the actual screen. Here on the right you see a little board with the connector to the world and on this board the electronics for the sound can be found. On the left side you see a board used for the brightness and contrast for the screen.



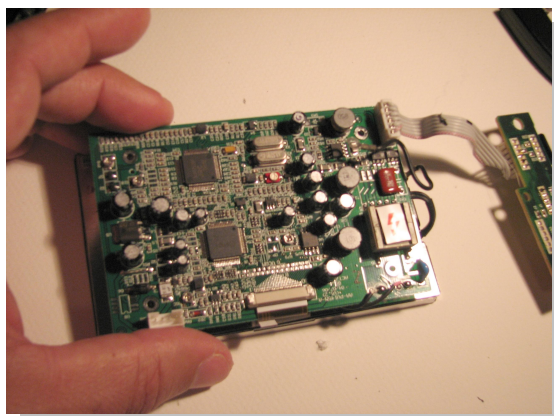
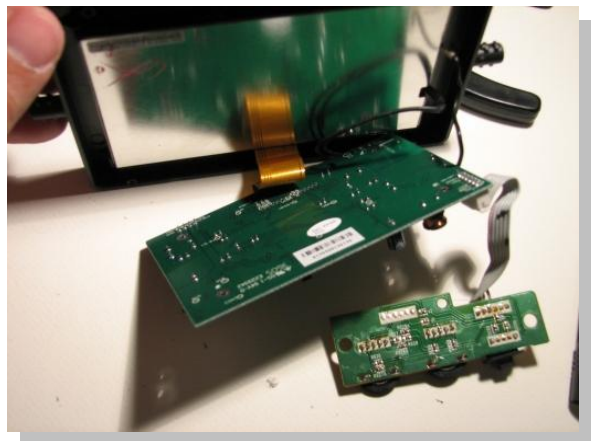
There are only two connectors on the little board to drive the screen. One attached to the brightness controlling board. And one, see the yellow arrow, which obviously feeds the board with the voltage needed and the video signal.

Unscrew the sound board and unplug the cable for the video signal and power.



Looking at the result we find the board is small enough for the place we want him to stay. But we still do not know the voltage the board needs and more important the pin he wants to receive the power.

So we have to release the board and screen from the last casing to have a look at the other side of the board. Hopefully we will find there the info we need.



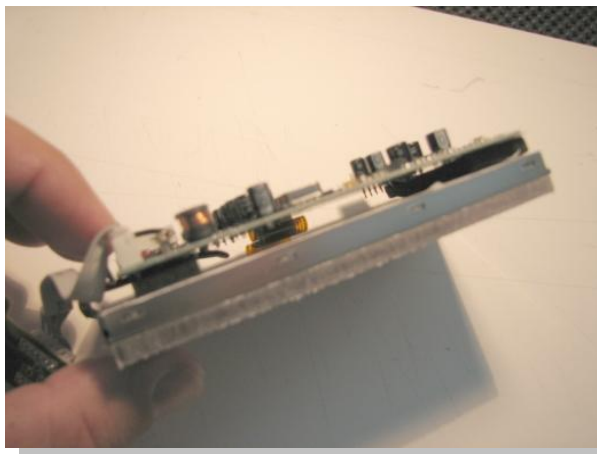
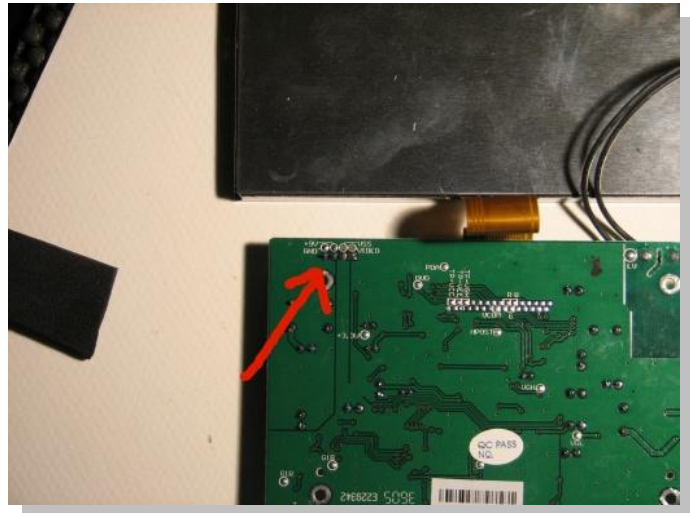
The electronics fit perfectly inside the screen measurement. This is great.

Now have a look at the other side.

And, yes there we find the info we need. The only four pins are 9V and ground and two for video and ground.

On the video and ground we can attach the composite video out from the VGA card inside our computer.

Know it will become very easy to get this baby alive and kicking!



Just put on front of the screen a 3mm thick glass sheet. The appearance will be great and the screen can't be scratched.

On the back I added some rubber sheet between the screen and the electronics.

Beware of the high voltage of these screens. When attached properly we can put the screen where it belongs ;-).

On the right you can see the place where the screen has to be placed. There is just enough room for the screen between the two knobs on the panels on the sides.



After making some serious adjustments at the back of the panel. The screen fits perfectly. I used some hot glue to fix it in the panel.

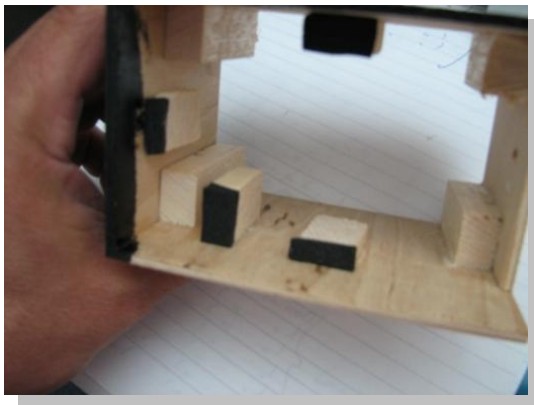
And a first test to see if some picture will appear.

It looks fine to me. Just have to make some adjustments to the picture and I have to make a new front for this section of the middle console.

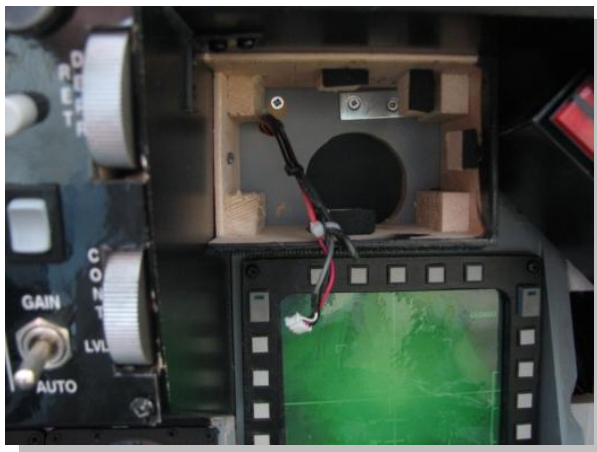
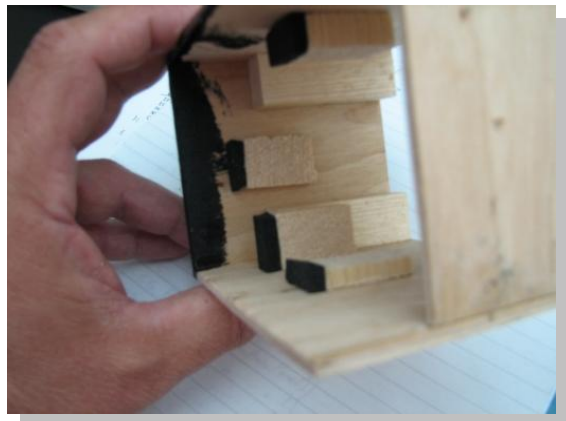
For the knobs of the HSI I will use four little buttons. I don't have enough room for rotaries, with some programming four little buttons will do the trick ;-).



The other screen of this car set will be used to display the DED and perhaps the fault list. First I made out of some wood a little box. Working with wood and some fast glue it is the way to make parts very fast and easy.

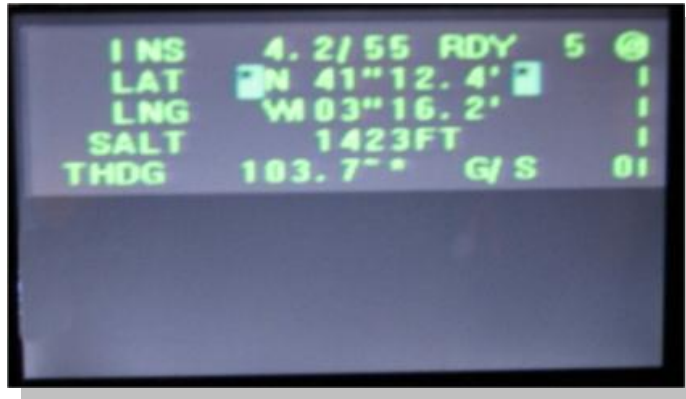


On the left you see the little wooden box for the DED screen. Inside I glued some wooden supporting pieces of wood. On them I glued rubber sheet.



The little box painted black and screwed down at his place. It fits perfectly between the right eyebrow lights and the ICP.

Also this screen has to be tested, and the result looks O.K. to me.



I hope I inspired some others to look at these solutions to. And maybe it is worth the effort to open one of those electronic picture frames. They are very cheap and I can imagine they will have almost the same electronic display board inside

As always I keep asking all the others in this loony hobby, make some little pdf's with the pictures you make on the road, and share them with others.

They may make improvements and so we can build our dreams faster and maybe cheaper.

Keep 'm flying,

Rien "HAMMER" Heideveld

If questions or comments, please mail me.

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