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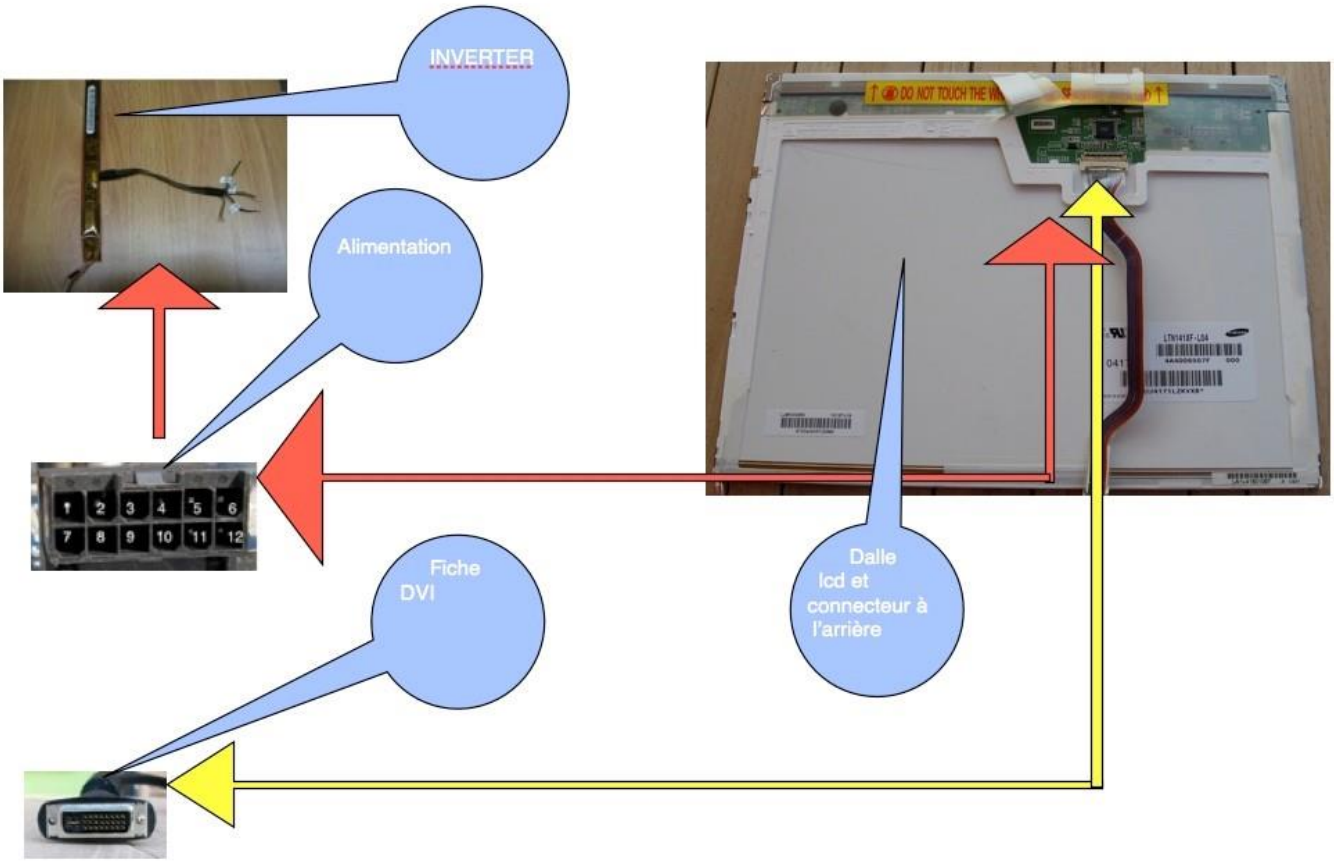
- Diagramme de l!écran.


INVERTER
Alimentation
Fiche
DVI
Dalle
lcd et
connecteur à
l'arrière

• Step by step to the realization! Screen from! IMac G5 17 "/ 20"!

Preamble:

This step aims at the realization! DVI display from! Faulty iMac and allow new life to our poor iMac, DVI is a connector that is not compatible with the VGA, I am not responsible for damage incurred following this step by step.

• Materials needed:
-1 IMac 17 "defective-

1 DVI cable, insulation 2mm / 4mm, ribbon, welded iron, son, various connectors, reversing switch, turn various screws, this magnifier

• What we will do: pick tile, connect it to a DVI cable, retrieve Food, retrieve the chassis of the iMac!.

Opening of iMac

• To start it will open the! IMac, head to this website, everything is very well explained http://macboostfr.free.fr/?p=196 , removed all the organs that leave! Diet.

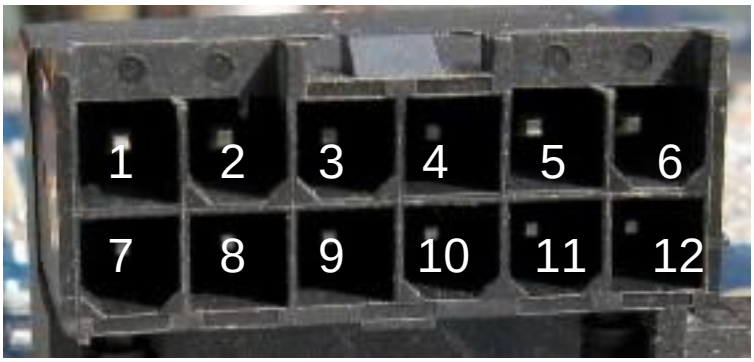
Adaptation of Supply

• We will use the! Power of! IMacs to power the slab and! Inverter. The Supply has 12V voltage, 5V, 3.3V permanent (All) used to start! IMac and 12V, 5V, 3.3V (Run) power available when the! Alim started.I will explain how to start the!

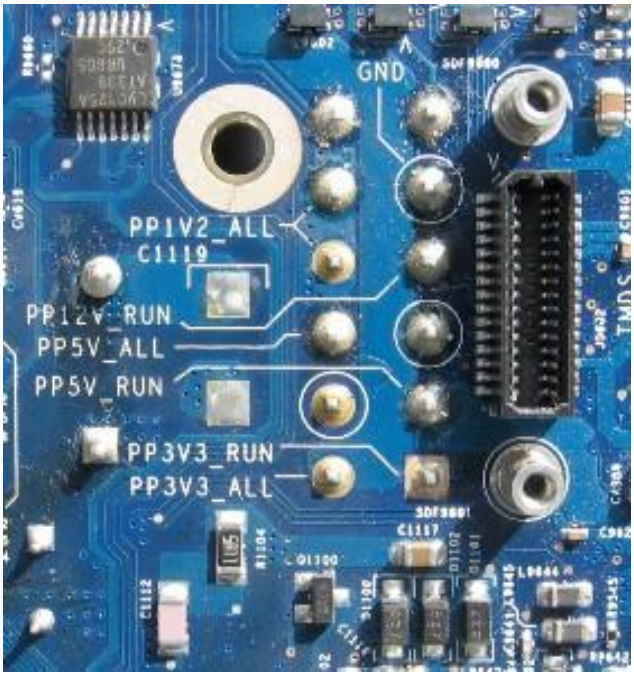
Table of Tensions On Connector

1	Start connected to ground	7	Start raccorder au 3,3v all
2	12V all	8	GRD
3	12V all	9	12V run
4	5V all	10	GRD
5	GRD	11	5V run
6	3,3V all	12	3,3V run

ThePower Connector

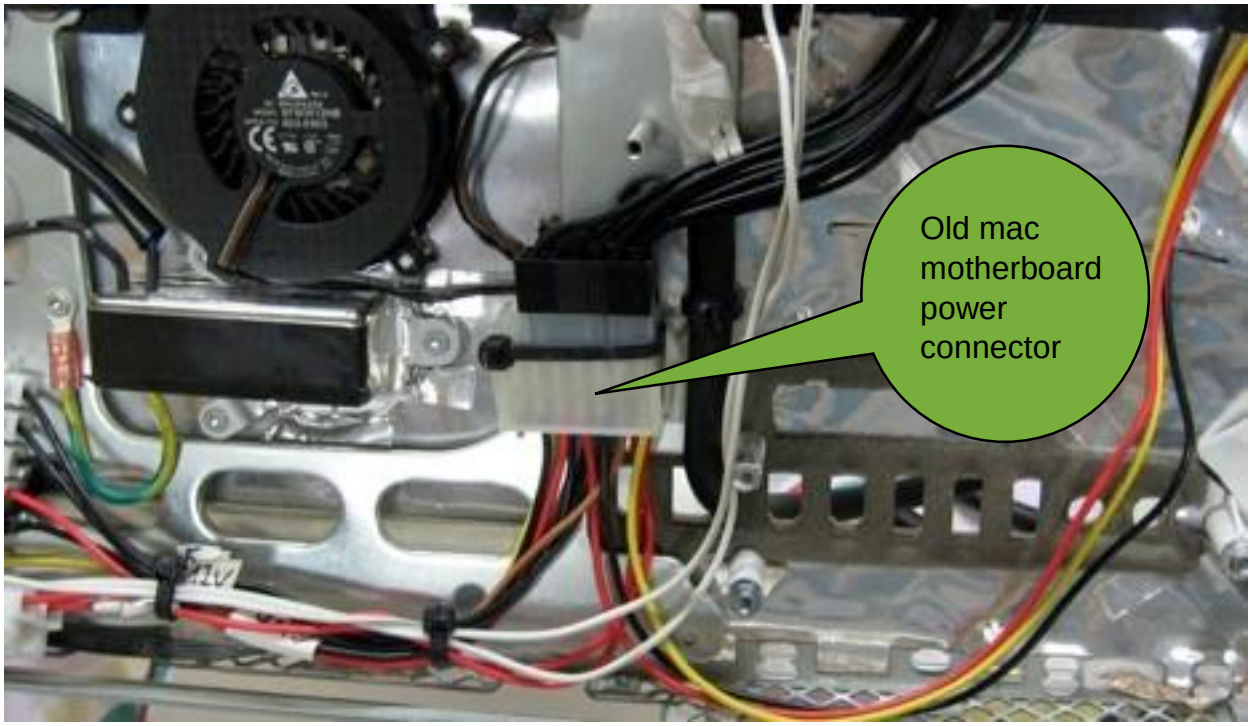


• Available voltage visible on the back of the logic board

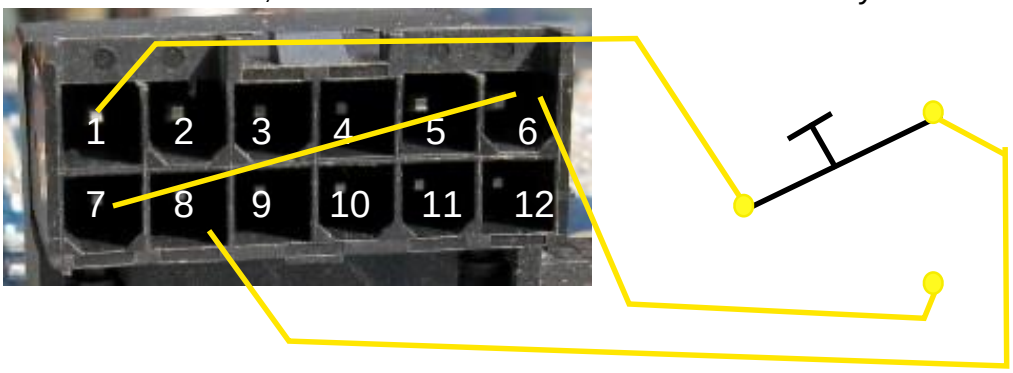


- **Device switching on the display!:**

For Organs of power! Screen using a connector that clips on the plug (I recover a connector on a mac card standby) or are cut and son using a chandelier or other connection, although spot

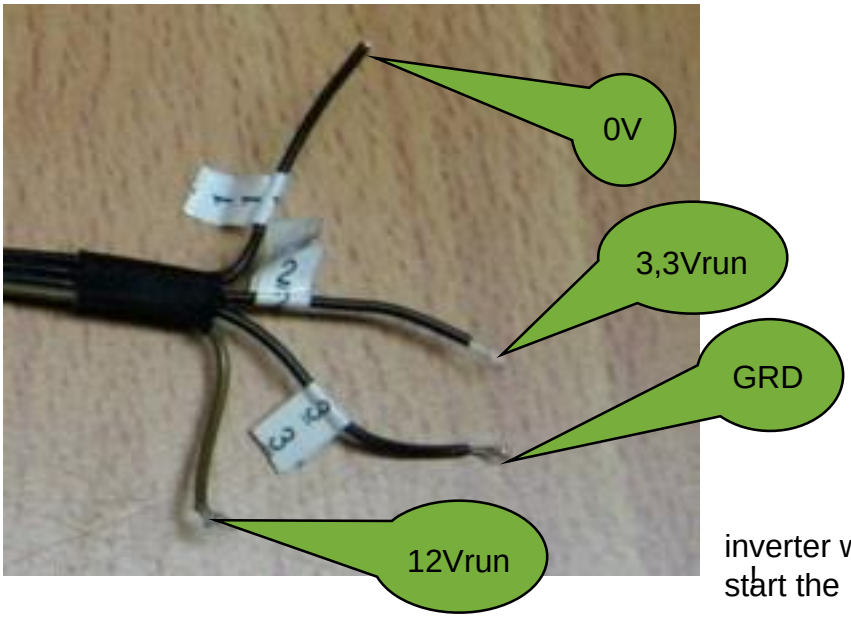


• To start the power supply must be connected to the 3.3V All over No. 7 and the DSO over No. 1. To stop the power supply must connect the son No. 1 3.3V All! -. 7 remains.
I Used an inverter, but can connect button on a bistable relay.

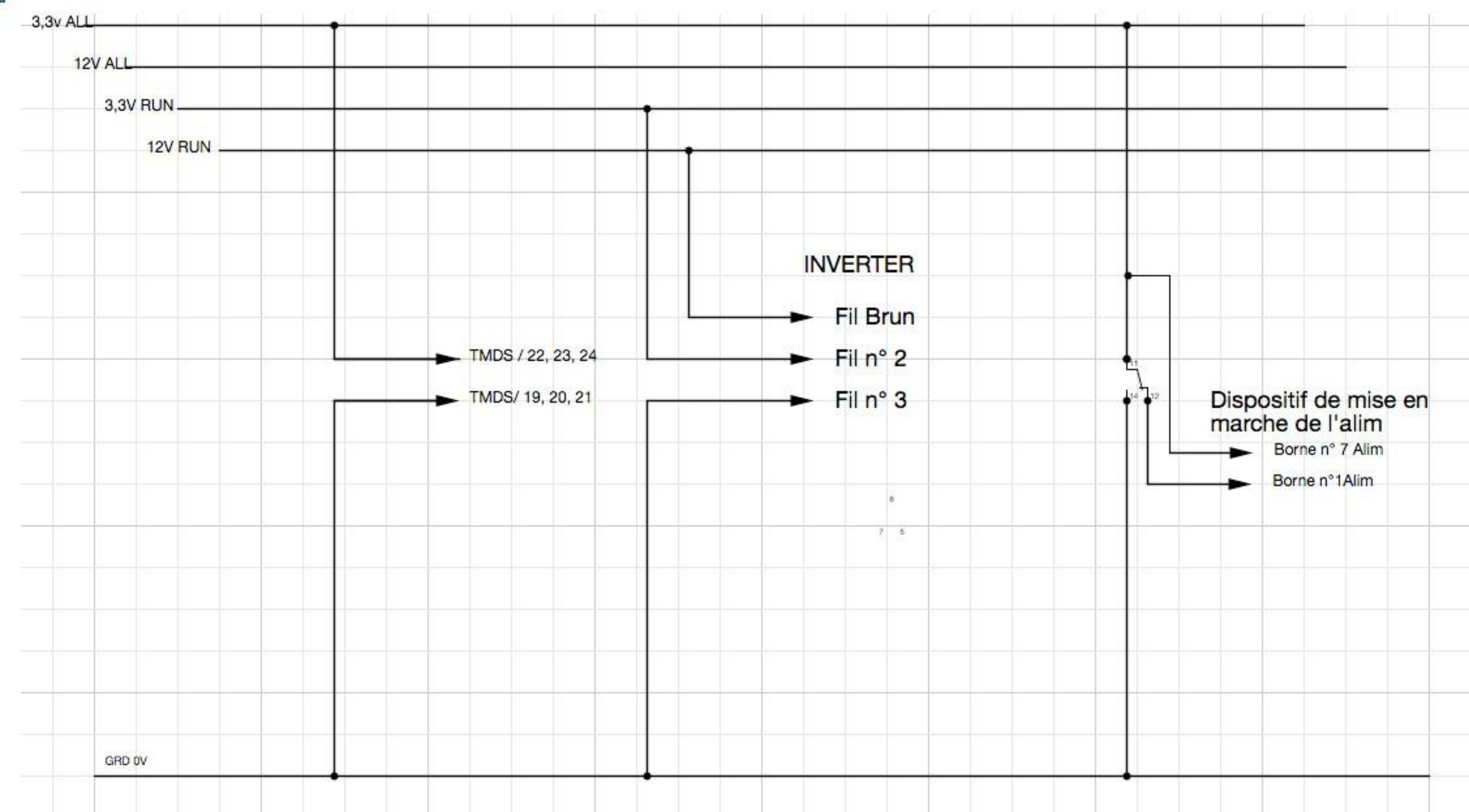


Food of! Inverter (which illuminates! Screen)

This inverter located on the right side of the slab, do not remove.



inverter will be fed only when we will start the PSU


3,3v ALL
12V ALL
3,3V RUN
12V RUN
INVERTER
Fil Brun
Fil n° 2
Fil n° 3
TMDS / 22, 23, 24
TMDS/ 19, 20, 21
Dispositif de mise en marche de l'alim
Borne n° 7 Alim
Borne n°1Alim
GRD 0V

Connecting the cable signal of the slab (DVI)

- To do this we need the datasheet from the DVI output

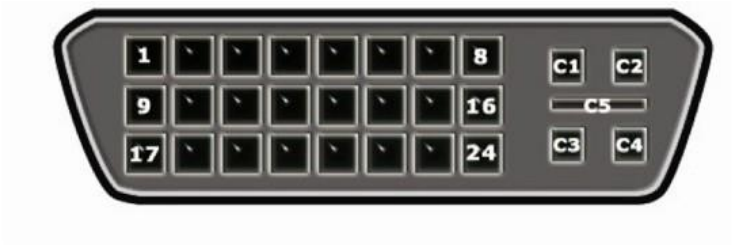


Figure 19: DVI-I Signal Pins

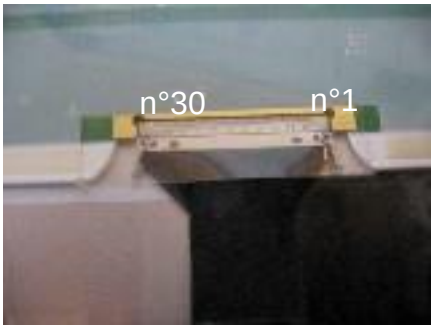
Pin	Signal	Pin	Signal	Pin	Signal
1	Data 2 -	9	Data 1 -	17	Data 0 -
2	Data 2 +	10	Data 1 +	18	Data 0 +
3	Shield (2 & 4)	11	Shield (1 & 3)	19	Shield (0 & 5)
4	Data 4 -	12	Data 3 -	20	Data 5 -
5	Data 4 +	13	Data 3 +	21	Data 5 +
6	Clock DDC	14	Power +5V	22	Shield Clock
7	Data DDC	15	Ground	23	Clock +
8	Analog Vertical Sync	16	Hot Plug	24	Clock -
C1	Analog Red				
C2	Analog Green				
C3	Analog Blue				
C4	Analog Horizontal Sync				
C5	Analog Ground				

TMDS
PLUG & PLAY
ANALOG

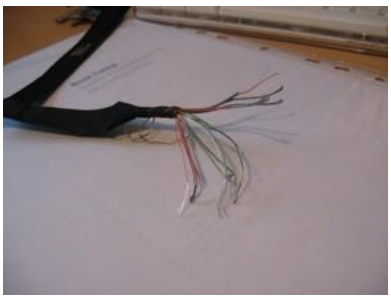
The datasheet of the slab for the 17 "Phillips
Connections between the two cables

Pin No	Symbol	Description		DVI cable
1	GND	Ground		
2	GND	Ground		
3	RX2+	TMDS Low Voltage Differential Signal Input Data 2(+)	→	Data 2+
4	RX2-	TMDS Low Voltage Differential Signal Input Data 2(-)		Data 2-
5	GND	Ground		-
6	RX1+	TMDS Low Voltage Differential Signal Input Data 1(+)		Data 1+
7	RX1-	TMDS Low Voltage Differential Signal Input Data 1(-)		Data 1-
8	GND	Ground		-
9	RX0+	TMDS Low Voltage Differential Signal Input Data 0(+)		Data 0+
10	RX0-	TMDS Low Voltage Differential Signal Input Data 0(-)		Data 0-
11	GND	Ground		-
12	RXC+	TMDS Low Voltage Differential Signal Input Data C(+)		Clock +
13	RXC-	TMDS Low Voltage Differential Signal Input Data C(-)		Clock -
14	GND	Ground		-
15	VEDID	DDC Power Supply 3.3V		3,3 all
16	NC	NC		-
17	CLK-EDID	DDC Clock		Clock ddc
18	DATA-EDID	DDC Data		Data ddc
19	GND	Ground		Grd
20	GND	Ground		Grd
21	GND	Ground		Grd
22	VCC	Power Supply 3.3V	→	3,3v all
23	VCC	Power Supply 3.3V		3,3 all
24	VCC	Power Supply 3.3V		3,3 all

The connector located at the back of the slab must be removed to identify



Strip the! Other end, beware there is very fine son and armored son, strip the son with the nails for example not to tear the copper strands.



Allow the thermal sleeve 2mm, noted the tape to son, a welded iron.
You need a DVI cable 1.5m long.

- Strip one end, watch out there very late son and armored son

This part is tricky, you need to connect the DVI cable to the cable that is connected to the slab containing the datassent each connectors.

1- Note the slab all the cable screen datasheet on each wire 1 to 24 by 17
2- "Note on all DVI cable DVI datasheet on each wire from 1 to 24
3- twist the pairs of TMDS son +/- to shorter order! avoided parasites.

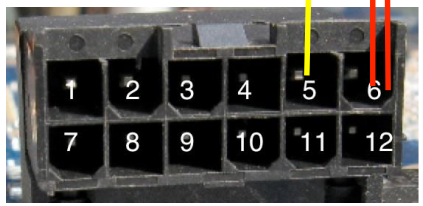
4- Connect together the son of two brothers cable except mass GRD other than fils19-20-21 which is the mass of the! power. observe the polarities +/- rx I n!'ve not connect the shield (ground)! Do not connect + 5V and hotplug nor son will (isolated) isolated welds with thermal jacket

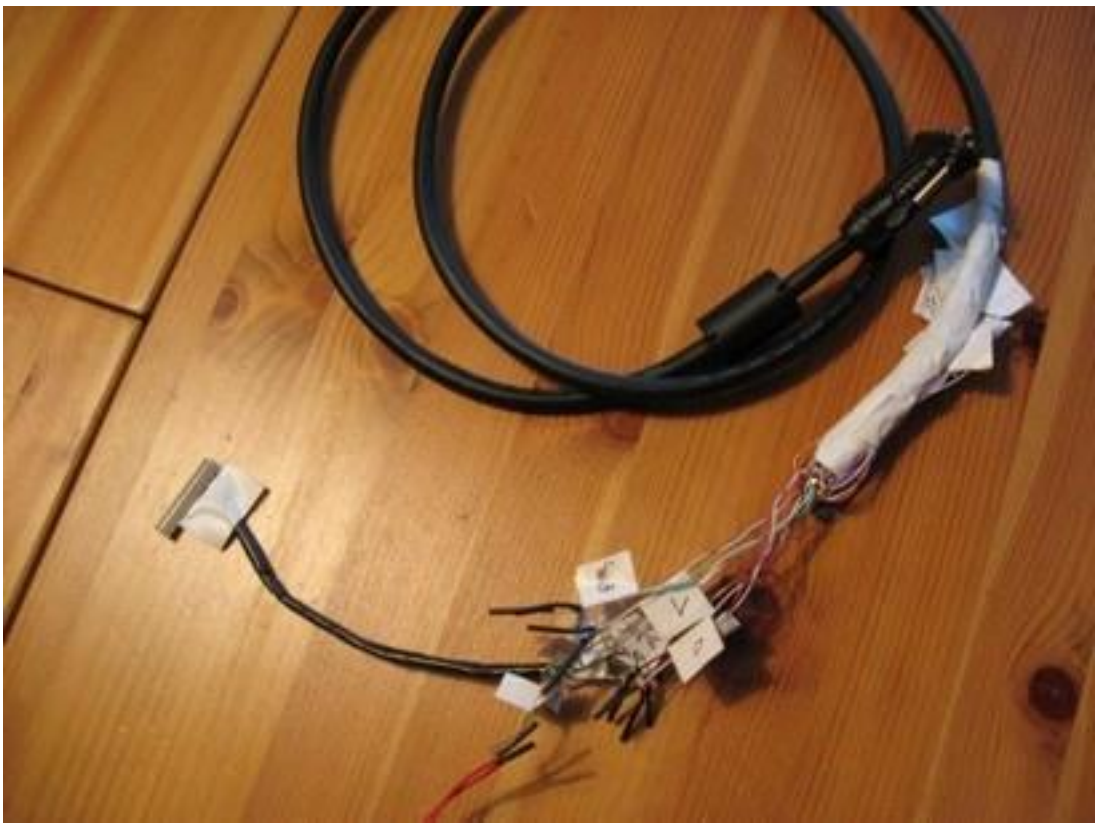
5- the 3.3V will be connected to 3.3V All of! Alim and of GRD GRD! 6- isolated power supply at the ribbon

DVI câble

Data 2+
Data 2-
-
Data 1+
Data 1-
-
Data 0+
Data 0-
-
Clock +
Clock -
-
3,3 all
-
Clock ddc
Data ddc
Grd
Grd
Grd
3,3v all
3,3 all
3,3 all

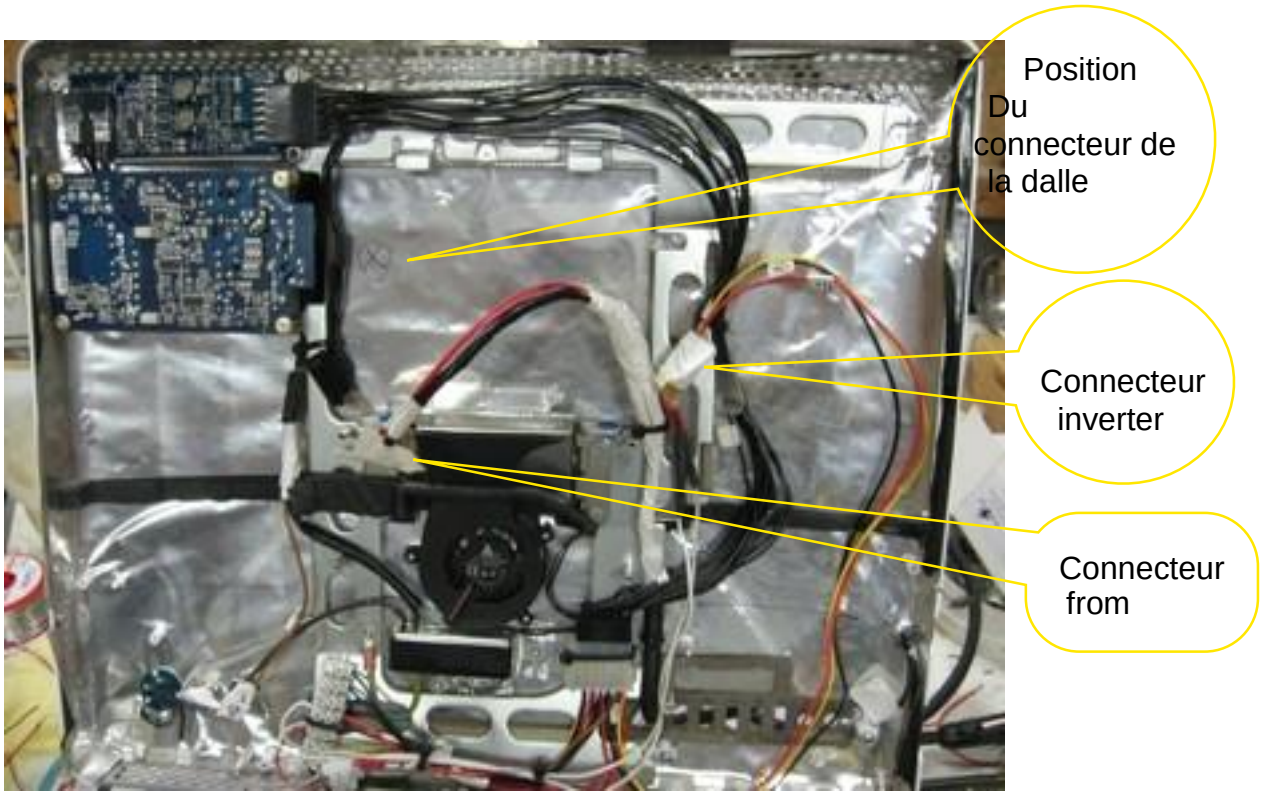
Pin No	Symbol
1	GND
2	GND
3	RX2+
4	RX2-
5	GND
6	RX1+
7	RX1-
8	GND
9	RX0+
10	RX0-
11	GND
12	RXC+
13	RXC-
14	GND
15	VEDID
16	NC
17	CLK-EDID
18	DATA-EDID
19	GND
20	GND
21	GND
22	VCC
23	VCC
24	VCC





Placing Cables

• Colsonner cables cleanly and mark the position of the connector of the panel when it is in place and mark on! IMac. Personally I spent the DVI cable into the hole of the ethernet jack !!! blah, otherwise pierce the center;-))


Position
Du
connecteur de
la dalle
Connecteur
inverter
Connecteur
from

I test the slab on a separate power supply, with the DVI cable connected to the slab and PWM

The slab is tested
Brightness is good, I can mounted in the Imac

Test voltages and power supply route setting

• Before connecting the slab and! Inverter, we must now test the setting alim road and break with the switch then test all the tensions so as not grill anything !!!!!!!!!! Take the test twice.

Pose de la from

• it remains only! a slab connector and connect the inverter and gently lay the slab. Connect the DVI cable to the! Computer and tension on! Screen, setting alim road and start the! Ordi :-))))))))))))))))))))))))))) it works?

(Ps: broadcasters can be reused quite sure, I leave you the pleasure)

Thank you in Kiryu MacBidouille


iMac