

USING PIONERO v5.0

WITH PHILIPS 607x

DECODERS FAQ

Although Pionero's primary target are Pioneer decoders and the manuals of earlier versions only mention those decoders, Pionero can be used with several decoder brands, not only Pioneer. Philips support was added in version 5.

Here you have some of the frequently asked questions about Pionero and Philips:

1- What can be done with Pionero v5 if you have a Philips decoder ?

- Update the firmware using the Jtag interface.
- Update and edit the channels list using the Jtag interface and Deemonru's serial functions.
- Update the eeprom using the Jtag interface.
- Receive frozen images using Jtag interface and Deemonru's serial functions.

2- What's a Jtag interface?

- It's a very simple and cheap device used to connect the PC to DVB receivers, DVD players or GPS receivers.

3- What are those "Deemonru's serial functions"?

- Those functions were implemented on the latest firmwares to send and receive data through the COM port of the decoder. Their main purpose is to read and write the channels list but they can also be used to receive a frozen image from the decoder and save it as a JPG with Pionero.

4- How can I use those "Deemonru's functions"?

- You have to use the serial cable that you used with lookerflash. To read any data you have to activate the COM port of the decoder (read the firmware's manual) and then go to the "Deemonru (serial)" section in Pionero. To send the channel list you have to activate the "Download from host PC" in the firmware's menu, go to the "Tuning" section and then click on "Active sections" subsection.

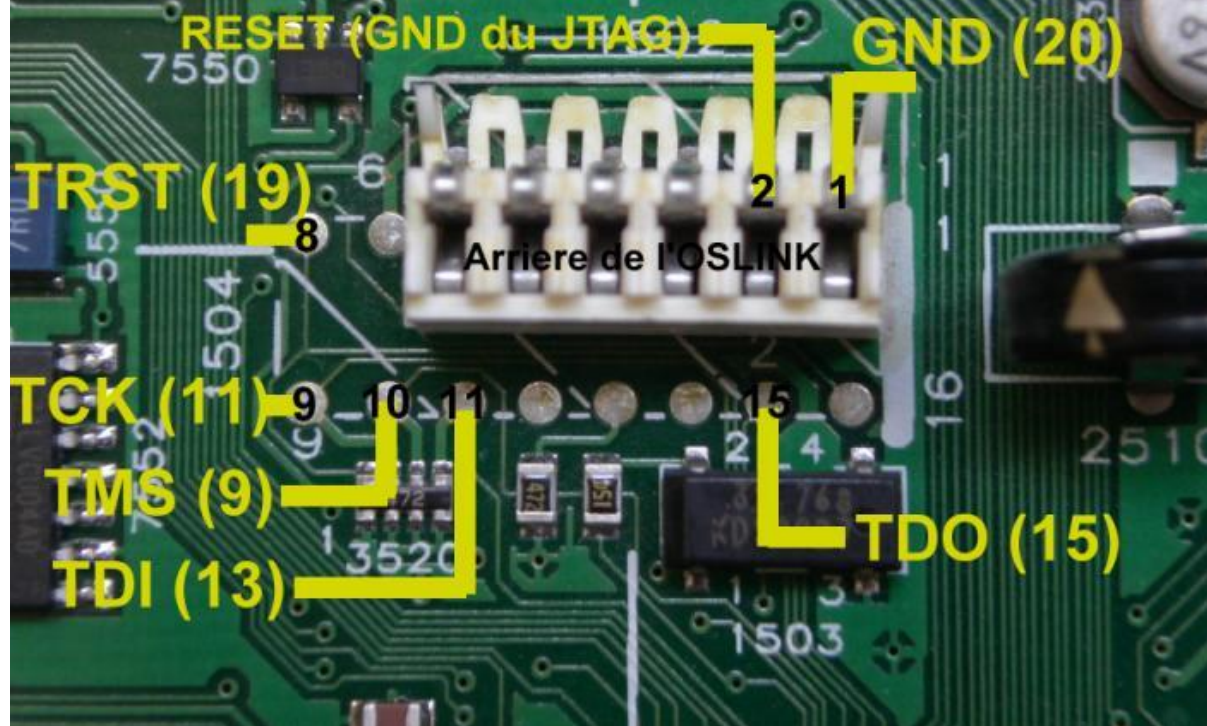
5- How can I use the Jtag interface?

- You have to use a parallel extension cable and a Jtag interface. You can use home made Jtag interfaces but they give **MUCH WORSE** results than those bought on electronics shops. Yes, you can even use those Jtag interfaces made only with resistors and diodes but you'll save a lot of time if you buy a cheap Jtag interface with a 74HC244 chip.

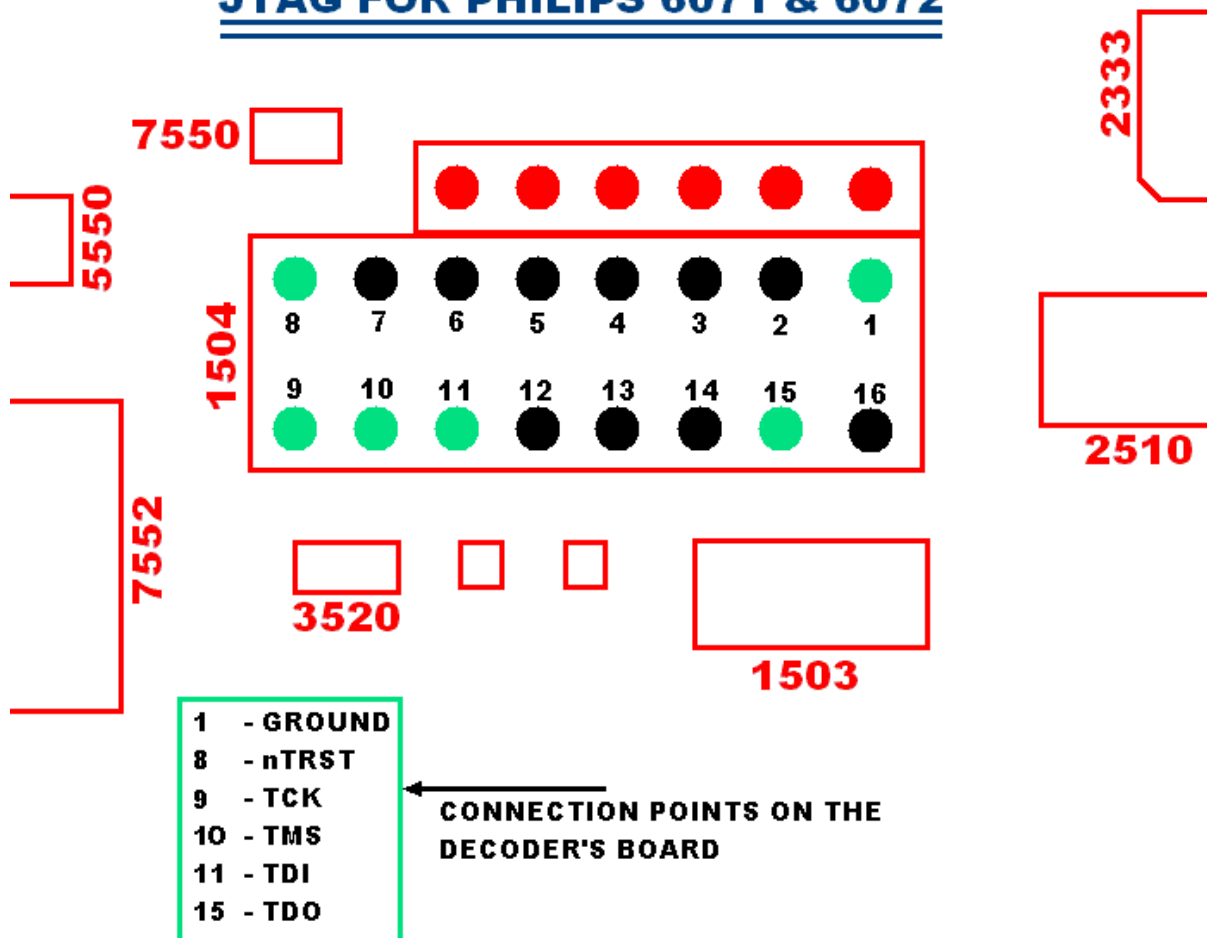
6- How do I connect the Jtag interface to the decoder?

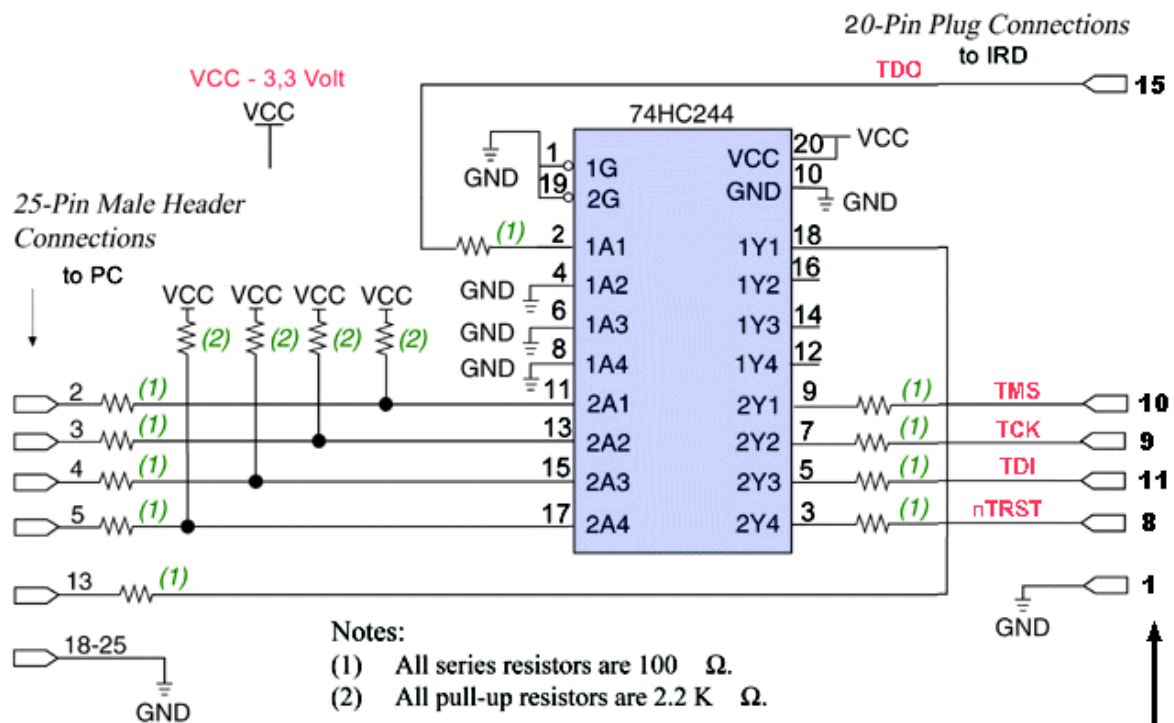
- Take a look at these pictures. The first picture is a real photo of the board but if you have problems understanding it, then take a look at the second picture (It's a simplified version of the first photo). The last picture is a Jtag schematic with the connection points of Philips decoders.

Nomenclature pour connexion vers un circuit JTAG



JTAG FOR PHILIPS 6071 & 6072





PHILIPS 6071 & 6072 CONNECTION POINTS ON THE DECODER'S BOARD

7- Any other tips hidden in the "leeme.pdf" file that we should know?

- Yes, there are couple of important tips. Sa1vad0r mentioned that he had to use 5 volts to power the interface instead of the usual 3.3 volts. He also had to connect the ground point of the Jtag interface to the point 1 on the board. Remember to select "Philips 607x" on the "configuration" tab.

8- What are the addresses and lengths that we should use?

	Address	Length
Channels list	0x7FE10000	0x70000
Firmware (dsx6071)	0x7FE80000	0x180000
Firmware (dsx6072)	0x7FE80000	0x160000
Everything	0x7FE00000	0x200000

9- Can we use Pionero to fix dead Philips decoders?

- Philips 6072 can be fixed without any problems using Pionero but 6071 are a much different case. 6071 decoders have the boot code mixed with the rest of the firmware on unprotected blocks!!! If you delete part of that boot code, you'll have to use an OSLink because Pionero doesn't initialize the EMI registers in the CPU like a program called Jkeys does. This issue was solved on Pioneer decoders because someone found a way to use Jkeys to fix their Pioneer decoders. We should do the same!!! :-D

10- Can we use Pionero's channels list editor or the eeprom editor?

- You can use the channels editor as long as you use an Open Firmware or Ducaditos firmware without problems. The eeprom editor supports only Dynamit's firmware for Pioneer decoders. Philips decoders store a few things on different locations but some other things on the same locations. We'll have to test every field of the eeprom editor and make a list of what can be modified.