

Serial interface kit for DTA CCD cameras

User Manual

february 2009

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Revision 1.2.1 dated 02/03/2009

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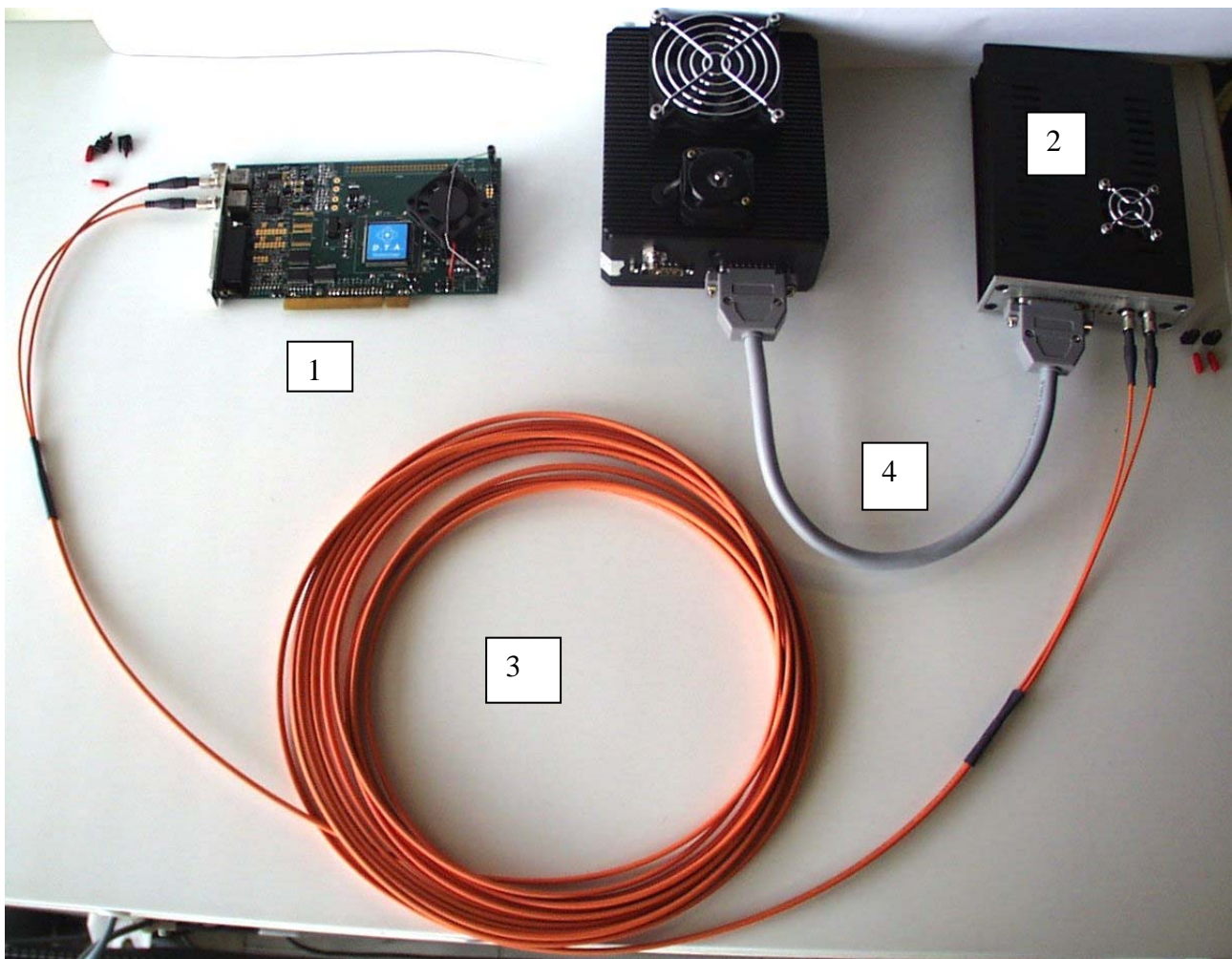
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INTRODUCTION

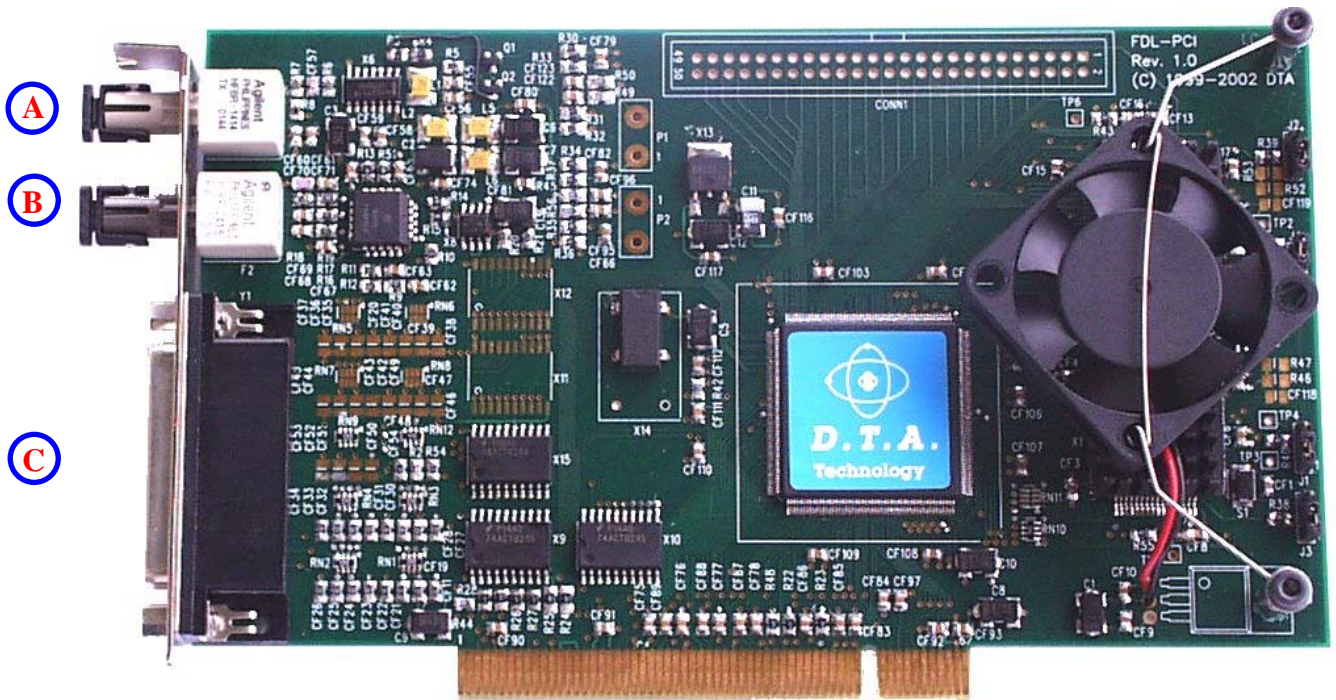
The Serial Interface kit sketched below allows you the connection of the DTA CCD cameras to the FDL-PCI interface card by the use of a Fiber Optic link cable.

The Serial Interface kit consists of:

- Serial interface card for BUS PCI (1)
- Serial/Parallel Decoder (2)
- Serial cable (two-channel optic fiber) (3)
- Communication parallel cable between Serial/Parallel Decoder and the CCD camera (4)
- Power cable (220 V) of the Serial/Parallel Decoder



DESCRIPTION OF THE CONNECTORS IN THE FDL-SERIAL CARD FOR BUS PCI



- A. **TX: transmitter for fiber optic.** Connect a channel of the fiber optic cable : of course the opposite terminal of the same channel must be connected to the Receiver for optic fiber of the Serial/Parallel DECODER.
- B. **RX: receiver for fiber optic.** Connect a channel of the fiber optic cable : of course the opposite terminal of the same channel must be connected to the Transmitter for optic fiber of the Serial/Parallel DECODER.
- C. Female 44 pin connector (**NOT USED**)

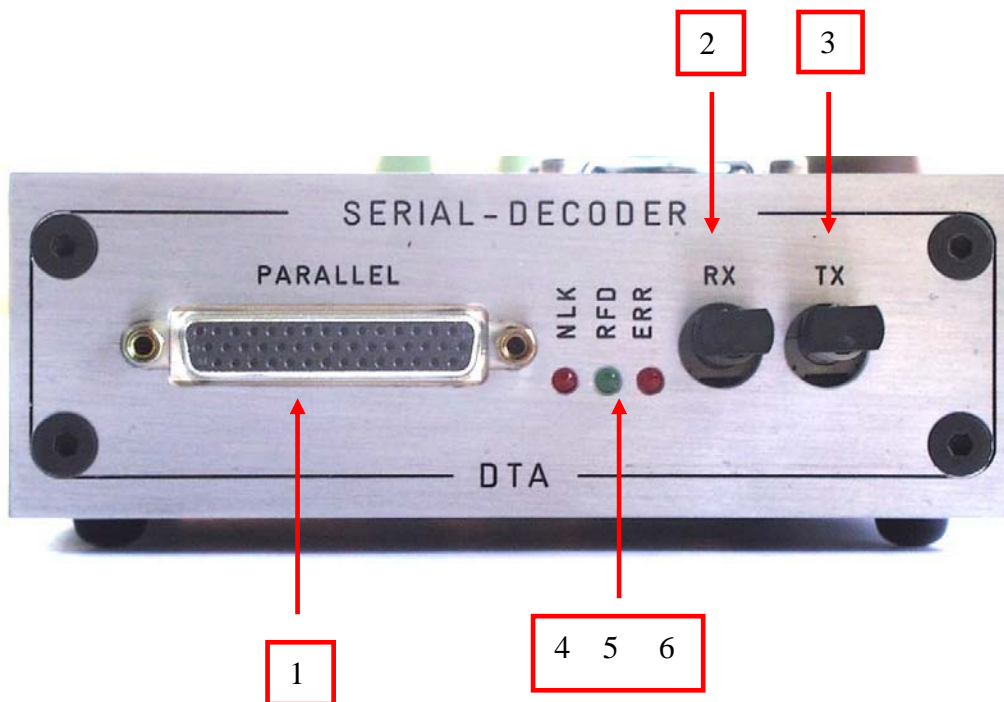
DESCRIPTION OF THE CONNECTORS OF THE SERIAL/PARALLEL DECODER

The serial decoder is the intermediate step between the CCD camera and the FDL-PCI Interface card.



DETAIL OF THE FRONT PANEL

Here below the description of the connectors and indicators in the front panel of the Serial/Parallel decoder:



1. Female 44-pin HD cannon connector for the parallel communication with the CCD camera (by means of the communication cable between the Serial/Parallel Decoder and the CCD camera included in the kit).
2. RX: receiver for fiber optic. It connect a channel of the fiber optic cable : of course the opposite terminal of the same channel must be connected to the Transmitter for optic fiber of the FDL_SERIAL card.
3. TX: transmitter for optic fiber. It connect a channel of the fiber optic cable : of course the opposite terminal of the same channel must be connected to the Receiver for optic fiber of the FDL_SERIAL card.

4. NLK Led. If this (red) led is on, the serial communication between the FDL_SERIAL card and the DECODER is not active. Check the correct connection of the devices as well as both the DECODER and the PC (on which it is installed) are on.
5. RFD Led. If this (green) led is on, the serial communication between the FDL_SERIAL card and the DECODER is active.
6. ERR Led. Any time this (red) led turns on, a communication error on the serial BUS has taken place.

DETAIL OF THE BACK PANEL



On the back panel of the DECODER there is the power-on switch of the device and the outlet for the power cable (VDE model).

SERIAL KIT ASSEMBLY

To assemble the SERIAL KIT carry out the following instructions :

- **Make sure any device is turned off (PC, CCD Camera, Serial/Parallel DECODER)**
- Insert the FDL-SERIAL card in a free slot of the PC and fix it by means of the clamping screw.
- Slip off the small protection caps of the TX and RX connectors in the FDL-SERIAL card : make sure not to dirty the inside of the connectors.
- Slip off the two small protection caps on one end of the fiber optic cable : make sure not to dirty the surfaces of the optical terminals.
- Softly insert the terminals of the cable within the TX and RX connectors of the FDL-SERIAL card. Then block them by means of the proper safety locks.
- Slip off the small protection caps of the TX and RX connectors in the Serial/Parallel DECODER : make sure not to dirty the inside of the connectors.
- Slip off the two small protection caps on the opposite end of the fiber optic cable : make sure not to dirty the surfaces of the optical terminals.
- Softly insert the terminals of the cable within the TX and RX connectors of the Serial/Parallel DECODER. Then block them by means of the proper safety locks.

***BE CAREFUL !!!* Make sure that the channel of the cable connected to the TX of the FDL-SERIAL card is connected to the RX of the DECODER and that the channel of the cable connected to the RX of the FDL-SERIAL is connected to the TX of the DECODER.**

- Insert the male 44-pin terminal of the parallel communication cable in the female 44-pin parallel connector of the Serial/Parallel DECODER. Then fix it by means of the proper clamping screws.
- Insert the female 44-pin terminal (it is on the other end of the cable) in the male 44-pin parallel connector of the CCD camera. Then fix it by means of the proper clamping screws.
- Turn the PC on.
- Turn the Serial/Parallel DECODER on.
- Make sure that the RFD green LED on the front panel of the Serial/Parallel DECODER is on and that the NLK red LED is off. Otherwise, verify every single instruction once again.
- Activate the serial link by means of the Vista SW, turn the CCD camera on, start Vista.

Serial/Parallel DECODER power:

- 230/115 V, 50/60 Hz.

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