

System interface Controller DTI-201U

Functionality:



The controller is designed for safe connection of any equipment produced by us (which has an appropriate opportunity) to the USB port of computer.

Advantages:

- Understandable graphical software interface
- Instantly change the required parameters of connected devices;
- Full galvanic isolation between the GND of the computer and car;
- Suitable for any device with a system interface;

Small size.

Instructions for connecting

1. Description and Assignment of contacts of 8-pin plug:

- 1.1. Contact 1 - +12 V is connected to the bus "ACC".
- 1.2. Contact 2 - "GND".
- 1.3. Contact 3 - «SB +». One of the wires of the system bus twisted pair.
- 1.4. Contact 4 - «TX». Output of low voltage UART-a.
- 1.5. Contact 5 - «SB-». The second wire of the system bus twisted pair.
- 1.6. Contact 6 - «RX». Input of low voltage UART-a.
- 1.7. Contact 7 - one of the bypass wires. Shortly connected with a contact # 5 on the board and with one of the contacts of the matching resistor.
- 1.8. Contact 8 – the second bypass wire. Connected with another contact of the matching resistor.

2. The controller is connected between the computer and the device (or devices if they are united on the system bus)¹. From the side of USB plug power is supplied from the computer, but from the car it is needed to be provided +12 V and the GND on the respective contacts of 8-pin connector.

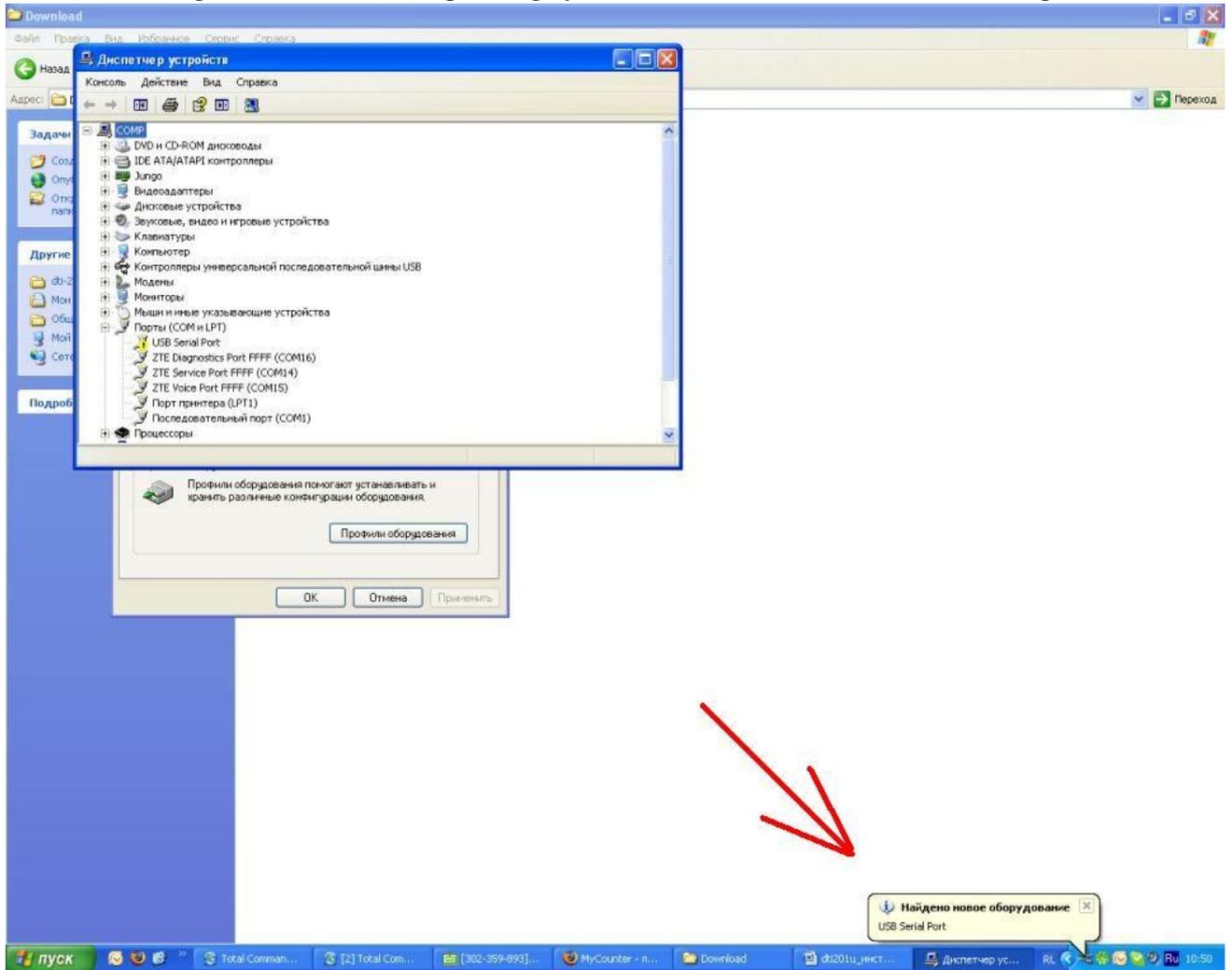
3. If the controller is connected to only one device, it is necessary to short contacts between a 7 and 8 of the connector. If you are connecting to a more united by a common system bus device, the contacts 7 and 8 should remain open.

4. In the event that the controller is connected to the computer for the first time, you must install the necessary drivers for its operating system (this is done only once). In the future, connecting the system controller will be detected automatically. To install the drivers necessary to implement the following steps:

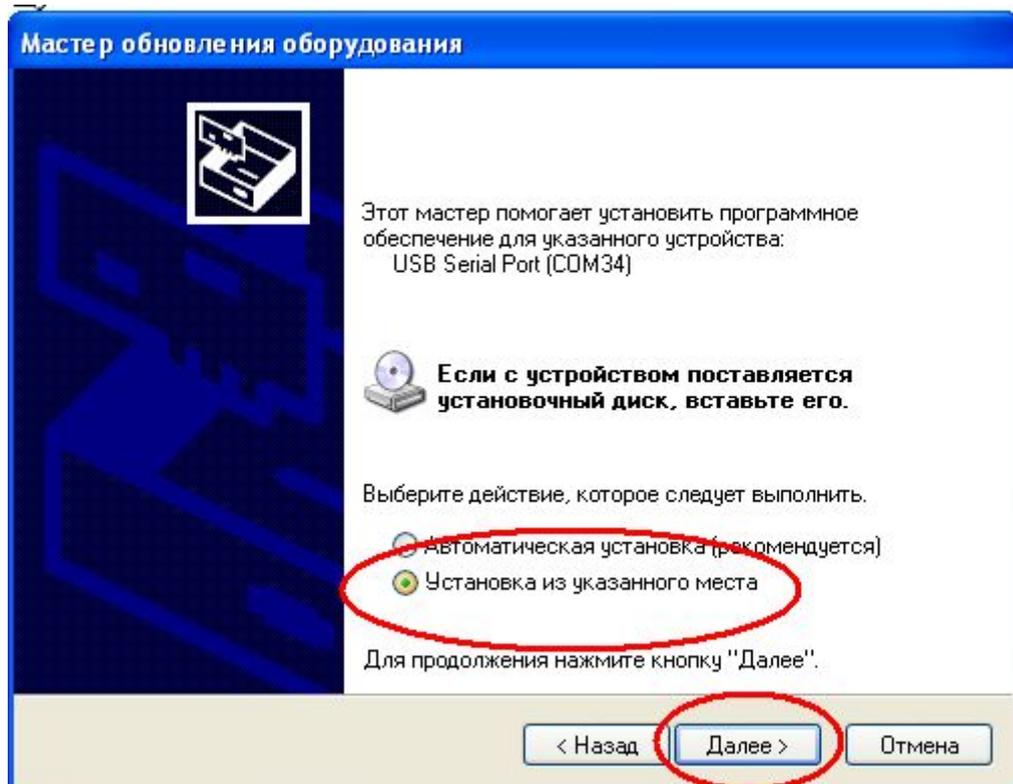
- 4.1. Download from site www.hvi.od.ua packed file "CDM 2.04.16 WHQL Certified".
- 4.2. Unpack it into some temporary directory, for example: C: \ CDM 2.04.16 WHQL Certified.
- 4.3. Then connect the DTI-201U to your computer

¹ - necessary connectors are included in set

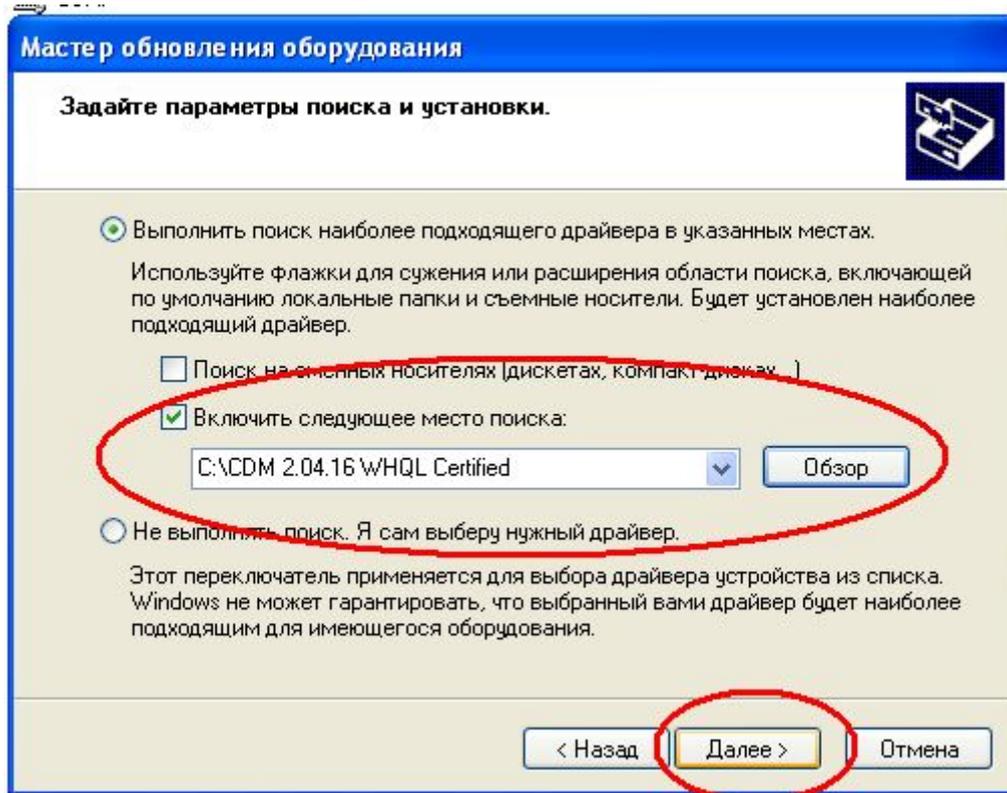
5. After finding a new device, the operating system will offer to install the drivers required for it.



6. You must select the manual installation mode.



7. To path to the directory where you unzipped the files are stored, twice.



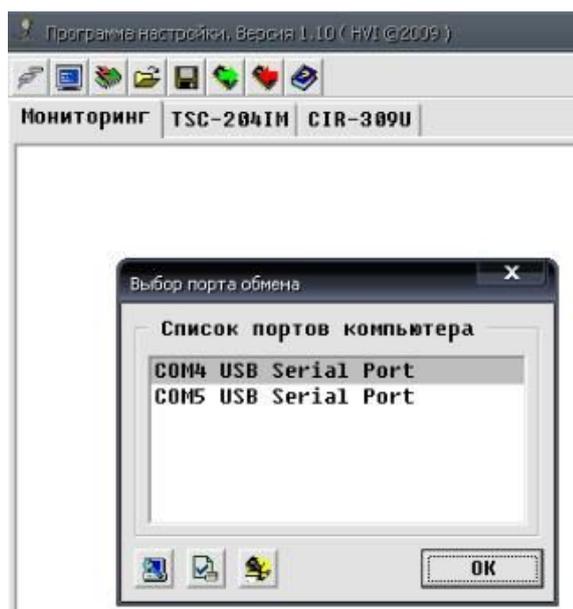
8. Then click "Finish" and exit the installation mode.

9. Immediately after installing the drivers, the controller is ready to work.

10. Downloaded from the website www.hvi.od.ua the latest version of the shell that supports all the currently available products, called OptoControl.exe, it is possible to control and programming of any our devices in which this feature is implemented.

11. But before you can operate a device, you need to make sure that the system controller is recognized, i.e. connected and functioning properly.

To do this, run the program OptoControl.exe and click the leftmost button "communication port", thereby selecting the window of settings of the controller.



In this window ports of the computer are specified, to which system controllers are connected at the moment. From the list you need to select the desired one. If your computer is connected to only one interface device DTI-201U, then no special actions for activation are necessary. In this case this window serves only to indicate the presence of connecting the controller to the port.

Attention! Before you disconnect the system controller from the USB cable, you must exit the "Program Settings".

Also in the box, you can see the button:



--- Button for ports list updating.



--- Button for receiving internal data such as software version, serial number, etc. of system controller.



--- for checking system controller operation

12.1. To update information on the connection state, just click "Update list of ports"

12.2. If you have some problems with data transmission, you must make sure that all connections are made with high quality and reliable. If this is so, but the link is incorrect or missing, you must use the tools provided in the software. Previously, from the car to 8-pin connector there should be only the power lines connected and the contacts 7 and 8 should be closed to each other.

12.2.1. Then press the button "check operation", run the test and follow the instructions that will appear in an additional window.

12.2.2. After successfully passing all tests, the controller can be considered serviceable. A cause of the problems encountered must be looked for in something else.