DEW*Com* Interface

Instruction Manual

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1. Application and construction

DewCom Interface is used for programming the **DewCom** dewpoint transmitter.

For programming, a computer is required with USB port and Windows® system installed.

The electronics are assembled on a single PCB and housed in an ABS plastic case. A USB-B socket is provided on one side and a terminal for connecting the DewCom transmitter on the opposite side. The interface is powered from the USB port and also provides the supply voltage for the DewCom which is being programmed.

Galvanic separation between the computer and theDewCom is provided. Two LED diodes indicate the direction of transmission: **Rx** (green) - the computer is receiving, **Tx** (yellow) - the computer is sending data.

2. Software installation

The interface drivers should be installed first.   After installation an additional virtual serial port will appear in the system.

The **DewCom Configurator** does not require installation.

It is sufficient to copy the **D-config.exe** file to the chosen folder on the hard disk.

Software should be downloaded from **http://storkinstruments.eu** website.

3. Connection diagram

The interface connects to the USB port of the computer using a USB cable, and to the DewCom using a special cable terminated with two plugs.

Both cables are delivered with the interface.

When programming, the DewCom transmitter is powered from the interface voltage - approx. 20VDC.

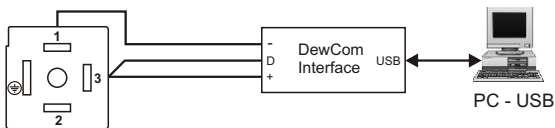See cable interface wiring diagram below.

Fig. 3.1
DewCom Interface to DewCom Transmitter connection

4. Device programming

4.1. Communication start

After installing the software, the DewCom may be programmed. To connect, do the following:

1. Launch **D-config** application.

2. Click the **Start** button and follow the steps in the message window:
   "Connect DewCom Interface to PC USB port. If it is already connected, disconnect and connect again. Then press OK".

   When the interface is identified, the description of the button changes to **Connect**, and the window below it shows the name and number of the virtual serial port you created during the installation of the driver interface.

   In case the following failure message is displayed:

   "*No response from DewCom Interface!!! Retry or Cancel."*

   This may be the wrong port number in the file **D-config.ini**.

   In this case, close the application, delete the file **D-config.ini** and run the application again. It will automatically find the correct port and create a new **.ini** file. In order for this to succeed, you must be logged on to Windows as an administrator.

3. Connect the DewCom-interface cable to the interface connector only when the transmitter is disconnected.

4. Click **Connect** button and a message box will appear:
   "Connect device to DewCom Interface and immediately press OK.".

   After OK is clicked, the computer reads data from the DewCom, and the progress bar indicates this process. After reading data all elements of the application window should appear (Fig.4.1.), and the description of the **Connect** button should change to **Disconnect**.

   In case a failure message is displayed: *"No response from device !!!*

Retry or cancel.". The connection attempt should be repeated step by step in accordance with the prompt messages. The term "immediately" in the body of the message means a maximum of 4 seconds. After this time, from power on, the DewCom goes into normal operating mode and connecting to it becomes impossible.
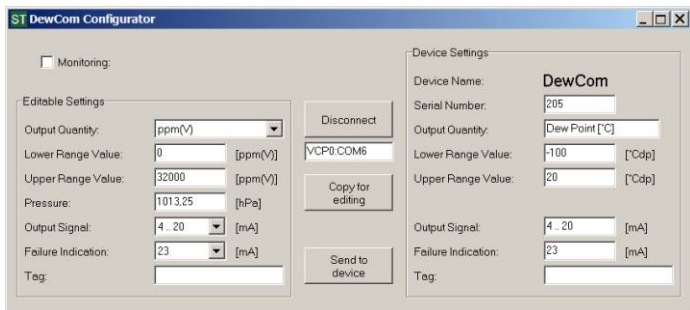

Fig. 4.1
D-config application window

4.2. Application window

There are two groups of editable windows:

We can distinguish two groups of windows when editing:

1. **Editable settings**, the contents of which can be changed by deleting and entering a new value or selecting from the list by clicking the scrolling window holding the arrow on the right hand side. The number and contents of each window vary depending on the contents of other windows, for example, the type of output quantity.

2. **Device settings**, which cannot be modified.

In the middle of the application window, there are buttons to click to trigger actions described below. Between objects in your application it is

convenient to move around using the mouse pointer and use the left soft key to activate windows, select text to be removed and for pressing buttons. You can also use the tab key for activation by pressing the space bar to start. As the decimal point for numeric values, use a character resulting from the regional settings of Windows (comma or dot) or dot on the numeric keypad.

Numerical values are automatically checked during the entry process. After leaving the edit box or clicking again values are corrected if required.

The **Copy for editing** button is used for copying values from the **Device settings** group to the **Editable settings** group.

After modifying settings it is possible to save them in the device memory by pressing the button **Send to the device**.

The recording process takes about four seconds. A progress bar appears, and the yellow LED **Tx** indicates transmission of data to the device. Immediately after writing actions are verified by reading and comparing data. The green LED **Rx** indicates transmission of data to the computer and a progress bar shows this in 8 seconds.

In the event of an error a window pops up "*Data error! Repeat writing?".*
Before disconnecting the transmitter, press the **Disconnect** button.

If you want to start working with another device, just follow steps 3 and 4 as described in section 4.1.

5. Technical data

• Computer side connector	USB-B socket
• Computer signal standard	USB2.0
• Supply current	
- programming	ca. 25 mA
- terminals **+** and **-** shorted	max. 150 mA
• Galvanic insulation between connectors	500 V AC
• DewCom Transmitter supply voltage	20 ± 2 V DC
• DewCom Transmitter supply output resistance	250 Ω
• Ambient temperature	0...+50 °C
• Dimensions	50 x 35 x 20 mm
• Weight	ca. 20 g
• Length of USB A4-B4 cable in set	1,8 m
• Length of cable interface - device in set	1 m

6. Contents of package

• DewCom Interface	1 pcs.
• USB A4-B4 cable	1 pcs.
• Interface - DewCom Transmitter cable	1 pcs.
• Instruction Manual	1 pcs.

Note:

Software (drivers and D-config application) must be downloaded from the
website **http://storkinstruments.eu**