User's Manual

dConfigurator PC Application

dConfigurator is a PC application for dCSS devices configuration.
It is compatible with Windows XP, 2K, 7, 8, 10.

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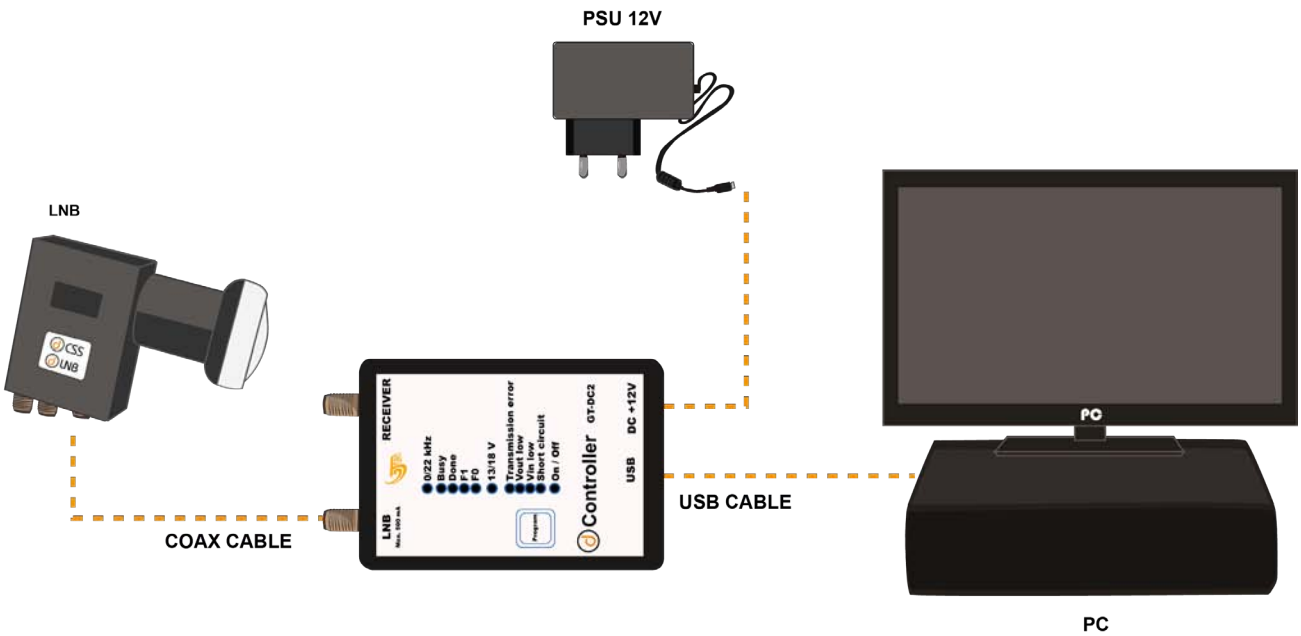
Getting started

1. Connect the dController and dCSS device according to the scheme below.



2. Copy installation files to any place on your PC hard drive.

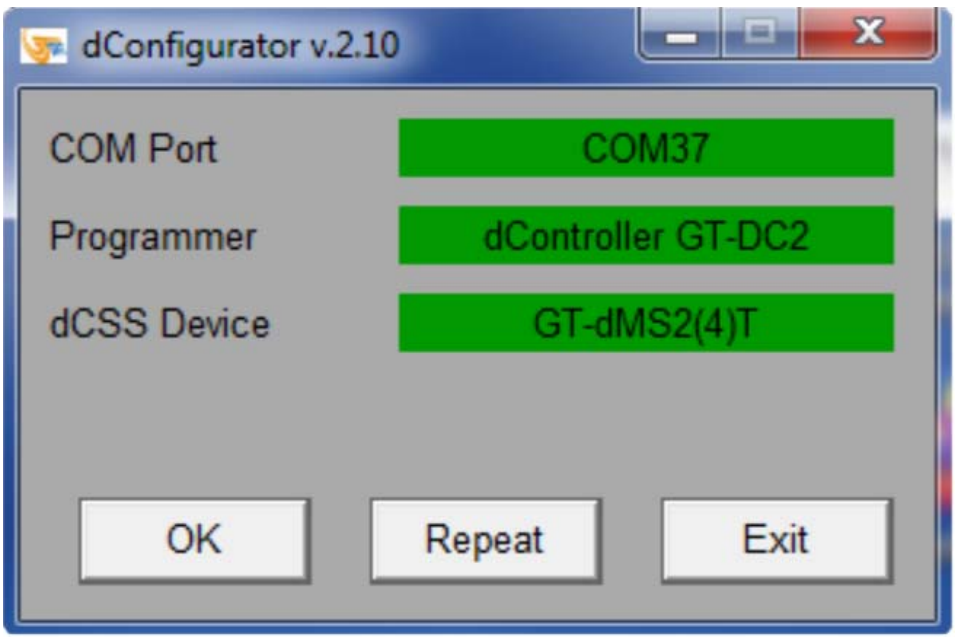
3. Run installation files.

4. After successful installation, run the application.

1. Application startup

After starting up the application, dConfigurator looks for the dController and connected dCSS device.

If COM port and dCSS device can be found it displays the following screen:

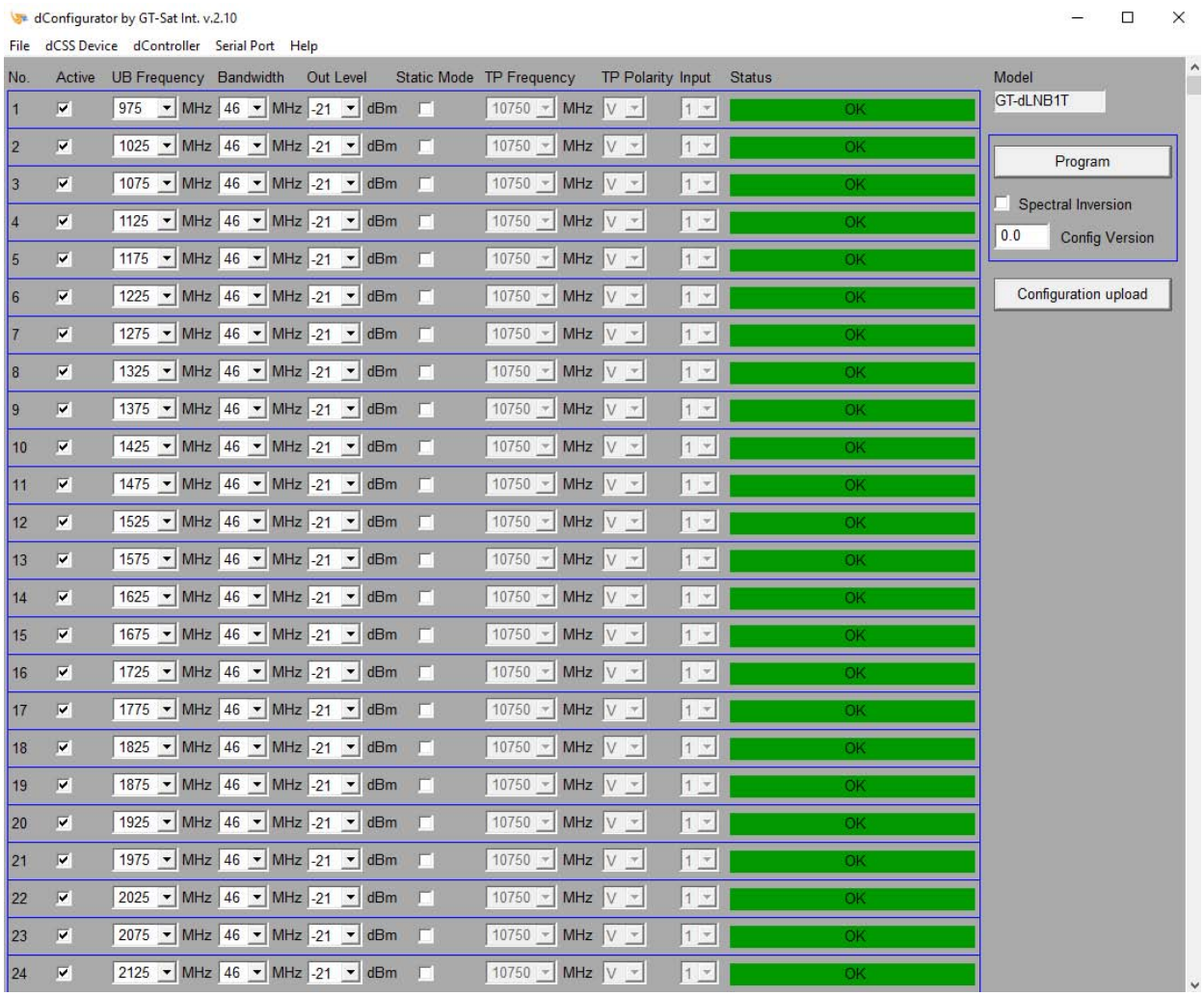


„OK" – application goes to main menu window.

„Repeat" – application repeates the operation of searching the COM port, and connected to it the dController and dCSS device.

„Exit" – application exits program.

2. Main application window



„Model" – Currently connected dCSS device model.

„Program" – application downloads the content of the window into dCSS device.

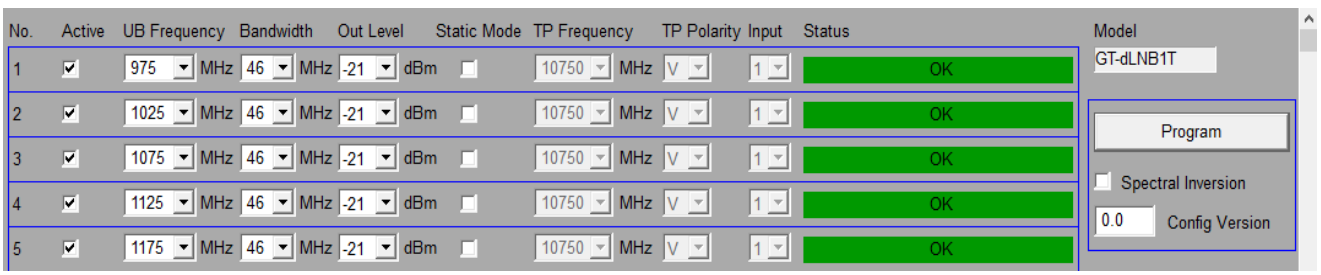
„Spectral Inversion" – it sets all User Bands in Spectral Inversion mode.

„Config version" – version of configuration will be stored in dCSS device during programming.

„Configuration upload" – application reads the UB configuration from dCSS device. All UB parameters will be displayed in the main window.

3. Configuration:

dLNB configuration is performed by setting appropriate values in main application window:



"No." – User Band number (1 to 24 or 32).

"Active" – Activate or deactivate User Band. Inactivity means that this User Band will neither react on DiSEqC commands nor appear on the output as static transponder.

"UB Frequency" – It sets the center frequency of the User Band on the output in the range of 950 to 2150 MHz.

"Bandwidth" – It sets the Bandwidth of the User Band on the output in the range of 24 to 82 MHz.

"Output level" - It sets the output level of the User Band signal in the range of -40 to -20dBm (67 to 87 dBuV).

"Static Mode" – It sets the User Band in static mode. In dynamic mode, dCSS device reacts on DiSEqC commands and sets the conversion of transponder to User Band according to the information in DiSEqC command. Static mode is equivalent to IF-to-IF SMATV headend. Preconfigured conversion is executed at power-on, it appears on the output and can't be changed by any further DiSEqC command.

"TP Frequency" – (Only for static mode) frequency of the converted transponder.

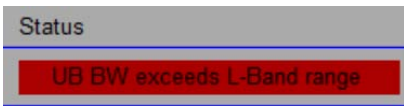
"TP Polarity" – (Only for static mode) polarization of the converted transponder.

"Input" – (Only for static mode) the feed (satellite) number where the converted transponder is taken from. It is mostly usable for monoblock LNB or multiswitches for 2 or more satellites.

"Status" – it gives the information about User Band status correctness. Green color with „OK" message indicates properly configured User Band. Red color indicates an error. Appropriate error message will be then displayed in the status window.

4. Error messages:

If one or more values of User Band in main window is typed incorrectly, the Status will be displayed in red:



Possible reasons:

"UB bandwidth overlapped" – Two or more user bands are overlapping each other. (fig.1)

"Duplicated UB frequency" – There are two or more user bands with the same center frequency.

"Output level out of range" – The output level has been set out of range of -40 and -20 dBm.

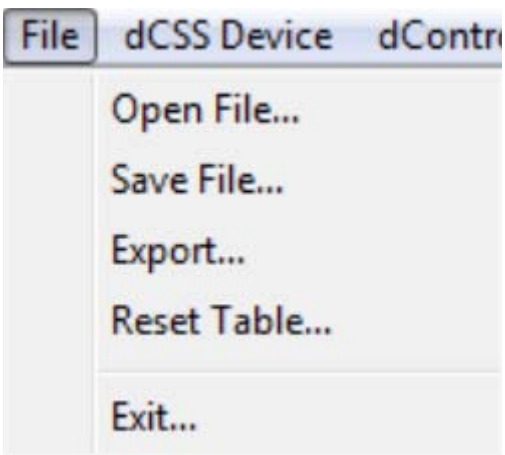
"Conversion freq. out of range" – The converted transponder frequency has been set out of range of 10700 and 12750 MHz. (fig.2)

"UB bandwidth out of range" - The user band bandwidth has been set out of range of 24 and 82 MHz.

"UB BW exceeds L-Band range" – The user band boundary frequency exceeds L-Band range. (fig.3)

"UB freq. exceeds L-Band range" – The user band center frequency has been set out of range of 950 and 2150 MHz.

5. Menu „File":



"Open File..." – Opens configuration file. It is a text format file.

"Save File..." – Saves the current configuration in text file format. Saving is preceeded by giving a file name.

"Export..." – Saves the current configuration in bin file format. It can be used by STB for dCSS device upgrade. Saving is preceeded by giving a file name.

„Reset Table...." – Sets the all User Bands parameters in main window to default values.

"Exit" – Exit the dConfigurator program.

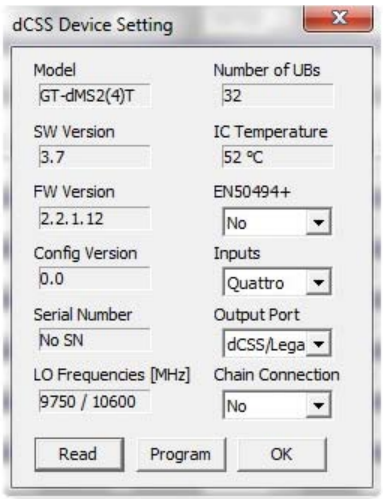
6. Menu „dCSS Device”:

“Settings…” – It opens a menu for dCSS device settings.

“SW Upgrade…” – It starts software upgrade to dCSS device. Upgrade is preceeded by file selection.

“Get dCSS device…” – Menu to read dCSS device type and set as active model.

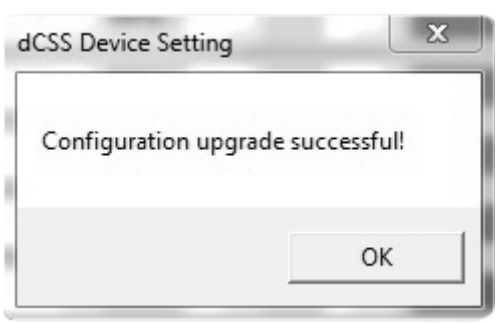
7. Window "dCSS Device Settings":



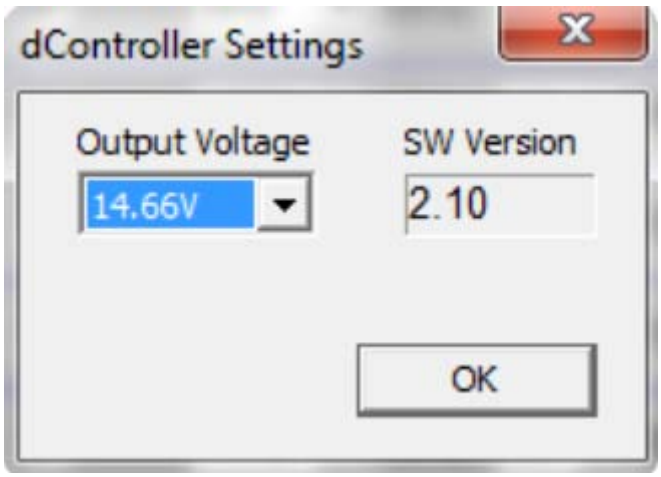
"Model" – displays the reference of currently connected dCSS device.
"SW version" – displays the current software version of the dCSS device.
"FW version" – displays the current firmware version of the dCSS device.
"Config version" – displays the current version of User Band configuration.
"Serial Number" – displays stored serial number (if any).
"LO Frequencies [MHz]" – displays the Local Oscillator frequencies used in the dCSS device.
"Number of UBs" – displays number of User Bands available in the dCSS device.

"IC temperature" – displays current temperature of the main chipset in the dCSS device.
"EN50494+" – displays current setting for EN50494+ feature. It can be set to "No" or "Yes".
"Inputs" – (only dMultiswitches) – displays the inputs configuration. It can be set to "Quattro" (1 satellite) or "Wide Band" (2 satellites). Proper LNB has to be connected upon set configuration.
"Output Port" – (only GT-dLNB2T, GT-dMS2T and GT-dMS4T models) displays current output port configuration. It can be set to "dCSS/Legacy" (legacy type is configured by default after power on; changed to dCSS output with first DiSEqC command reception), "dCSS" (only dCSS output working in static or dynamic mode), "Legacy" (only legacy output accepting 13/18V and 0/22kHz signals for band and polarization change).
"Chain Connection" – displays the Chain Connection configuration. It can be set from 1 to 8 or "No".

"Read" – button to read configuration from dCSS device.
"Program" – button to program new settings (fields: "EN50494+", "Inputs", "Output Port", "Chain Connection") to the dCSS device. After successful storing of the new configuration, a window with message *"Configuration upgrade successful!"* will be displayed on the screen.
"OK" – button to close the window.



8. Window „dController Settings”:



„Output voltage” – It displays current voltage and allows to set new voltage on output.

„SW Version” – It displays current software version of dController.

„OK” – Application exits the window.

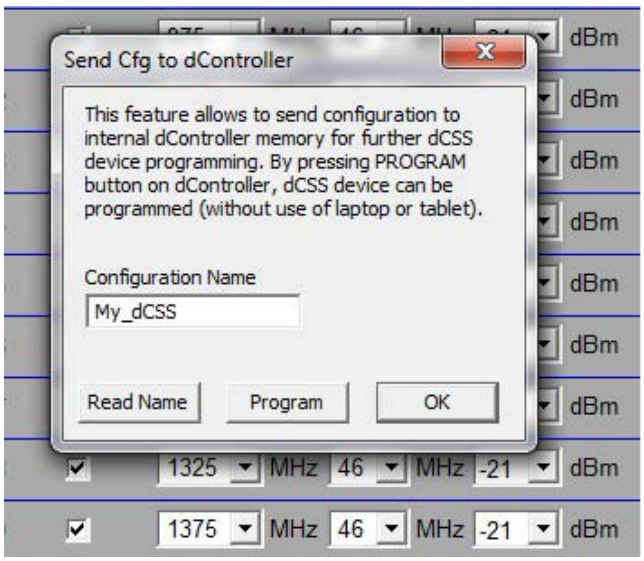
9. Menu „dController”:

“Settings…” – It opens a menu for dController settings (SW version, output voltage).

“SW Upgrade…” – It starts software upgrade to dController. Upgrade is preceeded by file selection.

“Save Cfg in dController…” – It opens menu to download the configuration file to dController for *outdoor* programming.

10. Window „Save Cfg to dController”:

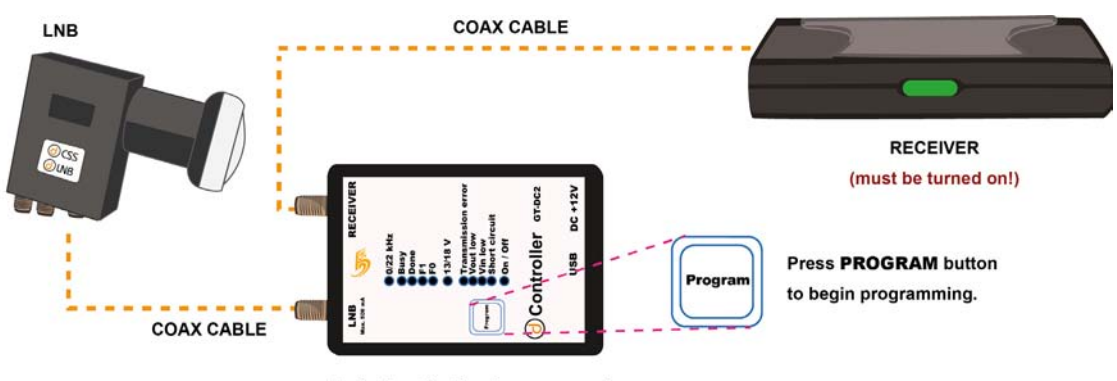


„Configuration Name” – A field to give a name to the UB settings from main window.

„Read Name” – It reads from dController the name of the last stored confgu-ration.

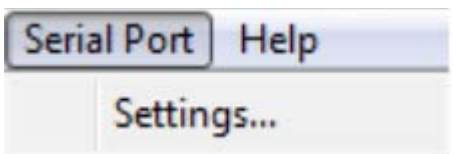
„Program” – Application downloads the UB configuration from main window to the internal memory of the dController.
Later on, by pressing PROGRAM buton on the dController, the dCSS device will be programmed (without connecting laptop or tablet). Receiver must be switched on in order to supply the dController and dCSS device.

„OK” – Application exits the window



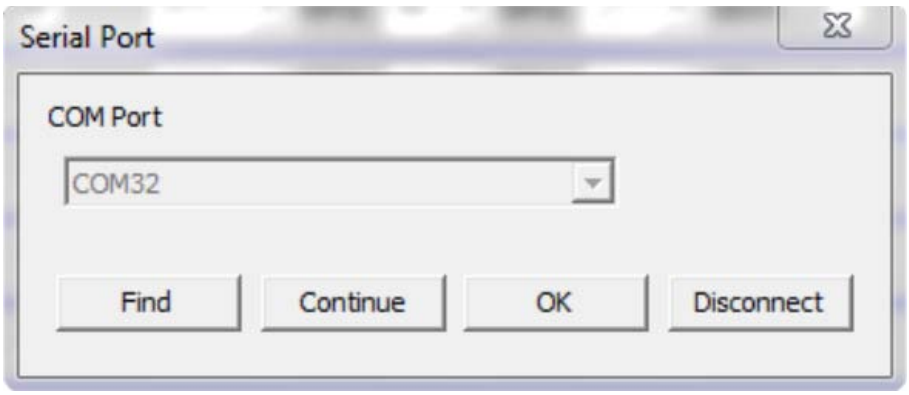
Typical application for programming.

11. Menu „Serial Port”:



“Settings...” – It opens a menu for searching for Serial Port (Find, Continue, OK, Disconnect).

12. Window „Serial Port”:



„Find” – It starts searching for serial port and connected dController to it.

„Continue” – In case of wrong COM detection, application continues the search.

„OK” – Applications stores the COM port and exits.

„Disconnect” – Application disconnects the COM port (releasing it for another PC application).

13. Window „About dConfigurator”:

„OK” – Application exits the window.

14. Description of LEDs
on the dController front panel:

„0/22kHz" – Yellow LED is ON when 22kHz tone is present on the LNB output.

„Busy" – Green LED indicating data transfer

„Done" – Green LED indicating end of transfer of data.

„F1" – Green LED for functional status.

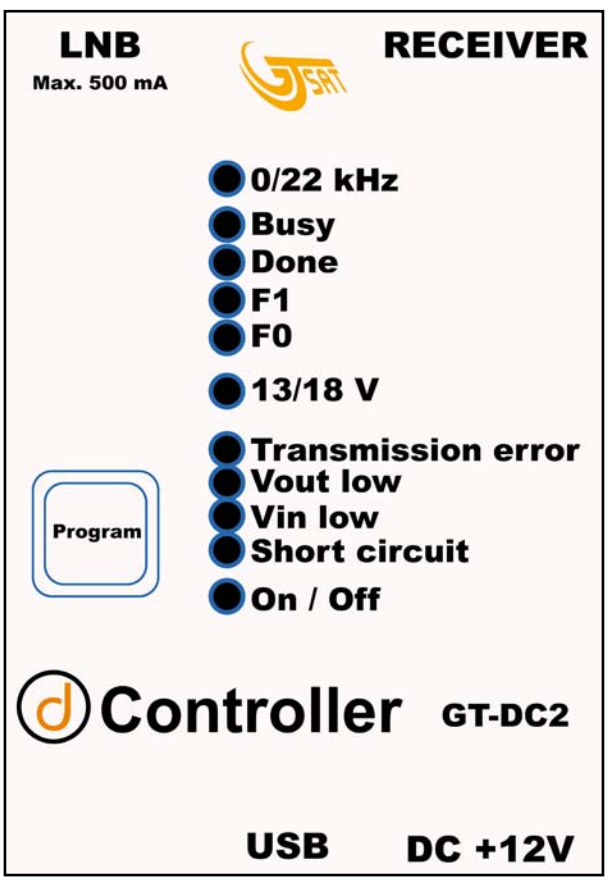
„F0" – Green LED for functional status.

„13/18V" – Orange LED is ON when LNB output voltage is higher than 15V.

„Transmission error" – Red LED is ON when there was an error in DiSEqC transmission detection (from ODU or receiver).

„Vout low" – Red LED is ON when the LNB output voltage is too low (due to too high load).

„Vin low" – Red LED is ON when the input voltage (supplied by Receiver input) is too low (below 11V).



„Short-circuit" – Red LED is ON when there is a short-circuit on the LNB output.

„On/Off" – Blue LED is ON when the power is supplied to dController.

After power-on all LEDs are lit for one second.

15. Troubleshooting

Problem	Reason	Action
1. Impossible to find COM port	USB cable or PSU is not connected	Reconnect PSU or USB cable
2. No LED is lit	No power	Connect power supply unit to dController
3. dCSS device can't be found	No dCSS device or wrong dCSS device is connected	Make sure, your dCSS device is supported by dConfigurator (Attention! Only dCSS devices from GT-Sat Int are supported by dConfigurator)
4. Message „No dCSS device is connected…"	dCSS device is not connected to dController	Reconnect the dCSS device with coax cable
5. Message „No reply from dController…"	dController is not powered or not connected to USB	Check power supply unit or/and reconnect the USB cable
6. Message „Wrong dCSS Device"	Wrong dCSS device is connected	Go to menu „dCSS Device -> Get dCSS Device" and find new dCSS device
7. Impossible to program dCSS device with PROGRAM button	No configuration is stored or no power supply	Make sure that configuration has been downloaded to dController and reconnect coax cable. Receiver must be connected with coax cable to port „Receiver" of dController and turned on.

16. Glossary

dCSS Device – LNB or multiswitch supporting dCSS technology.

Supported models: GT-dLNB1T, GT-dLNB1DY, GT-dLNB2T, GT-S1dCSS24, GT-S2dCSS24, GT-S3dCSS24, GT-dMS2T, GT-dMS4T, GT-dMS1WBT .

GT-dLNB1T *GT-dLNB1DY* *GT-dLNB2T* *GT-S1dCSS24* *GT-S2dCSS24* *GT-S3dCSS24* *GT-dMS2T* *GT-dMS4T* *GT-dMS1WBT*

dConfigurator – PC application running on Windows XP, 2k, Vista, 7, 8, 10 for programming the dCSS device. (picture 1.)

dController – Electronic adapter needed for programming the dCSS devices. (picture 2.)

Transponder – A frequency with certain bandwidth carrying TV signal of one or more TV stations.

User Band – a frequency with certain bandwidth appearing on the output of dCSS device carrying TV signal.

Static mode – static conversion of transponder to User Band.
Conversion appears on the ouput right after power on of dCSS device. dCSS device that works in static mode doesn't react on DiSEqC commands.

picture 1.

picture 1.