

**ELEN UNI-TXT TCP/IP**  
**Communication Protocol Simulator**  
**of TDU Displays**  
**User Manual**

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## Simulator program installation

To install the software, please copy, or unzip the entire folder ELEN-UniTxt with its contents to your PC hard disk. (e.g. C:\ELEN-UniTxt).

The folder includes files:

SimNd.exe  
TestUni.exe  
Uni\_Txt\_1\_02\_20.bin  
Uni\_Txt\_10\_v\_1\_00.bin  
Uni\_Txt\_v\_1\_00.bin

## Setting the Simulator

Double-click **SimNd.exe** file to start “ELEN UNI TXT Simulator“ application window.  
(Depending on Windows version, you might be prompted to allow application to start as administrator.)

Set the **Display Type** parameters according to your display matrix version.

For example, for display TDU 76-16/192x1x1, set:

No. of Columns: 192  
No. of Lines: 16  
No. of Rows: 1

**Port:** Port settings is set to 10001, this is default value. (You should not need to change it.)

If display has multicolor LED matrix, check the **Color** option.  
If display is monochromatic, leave the **Color** option blank.

Click **Update** button. You shall see the display **Simulation** window to pop-up, which is configured according to set parameters.

Please see example window on the next page.

## Sending command strings

Double-click **TestUni.exe** file to start “UNI TXT – TCP/IP demo“ application window.

Set the **IP Address** of the computer on which the Simulator (SimNd.exe file) is running. Usually it is the same PC running both applications. IP address can be found in window’s network settings of the PC. Port settings is set to 10001, this is default value. (You should not need to change it.)

In the “**Text functions:**“ field type the commands as per communication protocol UNI-TXT and textual strings, which should be displayed.

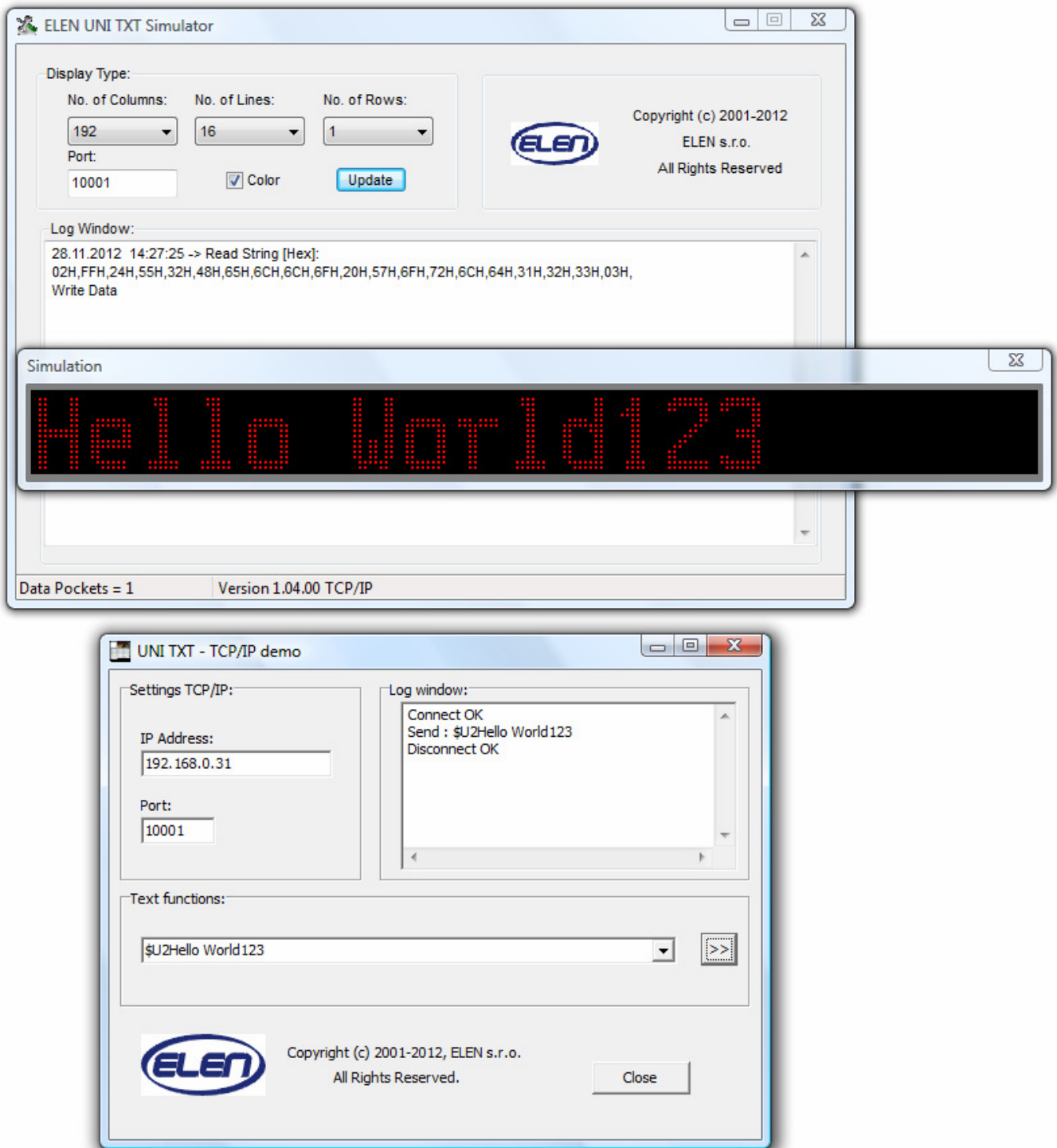
For example: **\$U2Hello World123** will display **Hello World123**.

Hex string which was sent into simulator can be viewed in Log Window.  
(Log Window can be cleared by right-clicking/“select all“ and right-clicking/“erase“.)

Press the **Send** button “>>“ and verify that the correct information is displayed in the simulator window.

The strings are stored in drop-down list, so that you can easily retrieve them later. Closing the program will not lose them, because they are stored in .ini file, which is automatically created after first time the program is started.

## Simulator Application Windows



To close the application, press the **Close** button or **X**.

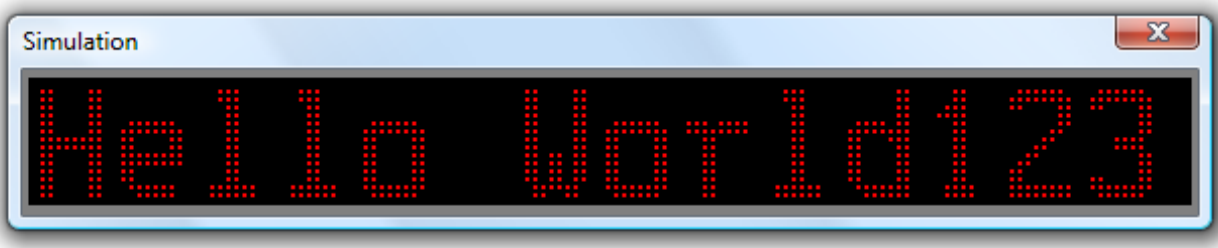
**Examples of text messages** (e.g. display matrix = 144 columns x 16 lines x 1 row)

**Example 1**

**Command sent:**  
\$U2Hello World123

**String [Hex]:**  
02H,FFH,24H,55H,32H,48H,65H,6CH,6CH,6FH,20H,57H,6FH,72H,6CH,64H,31H,32H,33H,03H,

**Display:**

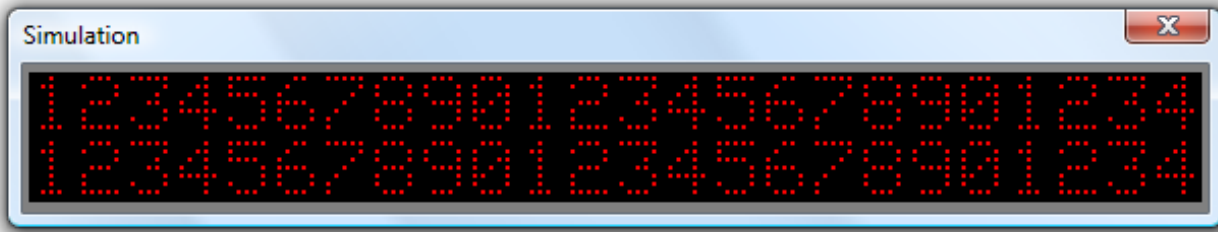


**Example 2**

**Command sent:**  
\$U0123456789012345678901234123456789012345678901234

**String [Hex]:**  
02H,FFH,24H,55H,30H,31H,32H,33H,34H,35H,36H,37H,38H,39H,30H,31H,32H,33H,34H,35H,36H,37H,38H,39H,30H,31H,32H,33H,34H,35H,36H,37H,38H,39H,30H,31H,32H,33H,34H,35H,36H,37H,38H,39H,30H,31H,32H,33H,34H,03H,

**Display:** (please note, only 16-dot matrix can be split into two rows, 10-dot matrix will display only 1 line)



**Example 3**

**Command sent:**  
\$U0\$C2\$Mmoving message\$CR\$C1\$H0 \$N3 \$J015\$C3\$J015\$C2\$J015

**String [Hex]:**  
02H,FFH,24H,55H,30H,24H,43H,32H,24H,4DH,6DH,6FH,76H,69H,6EH,67H,20H,6DH,65H,73H,73H,61H,67H,65H,24H,43H,52H,24H,43H,31H,24H,48H,30H,20H,20H,24H,4EH,33H,20H,20H,24H,4AH,30H,31H,35H,24H,43H,33H,24H,4AH,30H,31H,35H,24H,43H,32H,24H,4AH,30H,31H,35H,03H,

**Display:** (please note, only 16-dot matrix can be split into two rows, 10-dot matrix will display only 1 line)

