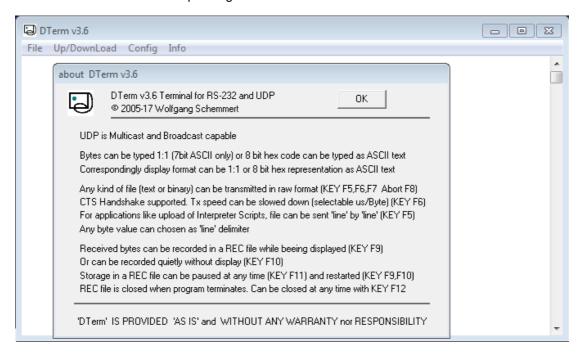
## DTerm user manual

DTerm is a **terminal emulation for Windows**<sup>™</sup> **to send and receive RS-232 bytes as well as UDP packets** - comparable with a TCP Telnet session, but without the need to maintain a "connection". Additionally transmission and reception of raw bytes and complete files is possible. It has been tested to work with Windows 98, 2000, XP and 7.

A similar software specially designed for native MIDI ports is provided at this website, see "MIDITERM"

DTerm comes more or less self-explaining:



Some features shall be explained more specifically:

By default, DTerm is configured as follows: Communication mode: RS-232, 115.2 kBaud, COM1, 8N1, no handshake. By menue or with Key F4 you get into the configuration dialog. You can select:

- RS-232 mode:
  - COM1...COM6,
  - Baud Rates 9600, 19200, 38400, 57600, 115200, 230400 (if supported by hardware)
  - CTS handshake. RTS handshake is not supported because it is usually not needed
- **UDP mode**: IP address (Multicast and Broadcast are supported)
  - Rx=local Port number
  - Tx=destination Port number

DTerm comes with following UDP default setup: IP is 192.168.0.240. The default Tx port is 8000, the default Rx port number is 9000. This is conformant with the default setting of the <a href="Ethernet to">Ethernet to</a> MIDI&RS-232 + DMX512 Interface described at this website.

- Both modes:
  - Local Echo
  - Bytes typed as plain ASCII (7 bit only) or as ASCII text representation of binary 8bit values
  - Bytes displayed as plain ASCII or as hexadecimal ASCII text representation of binary 8bit values
  - Screen Font
  - Erase Screen
  - Save Setup as preset

**Send and receive of any files is supported.** File content is handled "binary" - no special treatment of text files. No transport protocol or checksum is supported. This may be a risk for data integrity but raises flexiblility.

Features and corresponding command keys (also selectable by menue) in detail:

• F1: display "Info" dialog with short manual

- F2: Select Send File (is stored in preset and re-selected when DTerm is started)
- F3: Select Receive File (is stored in preset and re-selected when DTerm is started)
- F4: open configuration dialog (see above)
- F5: Send File "line by line". The line terminating character can be selected freely in the configuration dialog
- F6: Send File "slowly". The additional delay per byte can be selected in the configuration dialog. This may be useful to send files to slow devices with small buffers which do not support CTS handshake
- F7: Send File as fast as possible
- F8: Abort file transmission immediately
- F9: Temporarily store any stream of received bytes while the content is displayed. No timestamp
- F10: Temporarily store any stream of received bytes silently without display. No timestamp
- F11: Pause temporary storage. The text "\_PaUsE\_" is inserted into the record file for later recognition of different record segments. Recording can be restarted at any time with Key F9 or F10 and is appended to the originally opened file. The resulting file is stored on disk when you close DTerm or type Key F12. If Key F9 or F10 is pressed again after recording was finished with Key F12, the selected Receive File is overwritten without warning
- F12: store temporarily received file on disk and close it. Receive option started once, the file is stored in any case when DTerm is terminated

## How to send raw bytes:

If you have selected command input as hex bytes then a single byte is entered as follows and transmitted immediately:

First **enter the high nibble** as a hex digit 0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F. Letter input is case insensitive. **Next enter the low nibble** the same style. Terminate input with a <SPACE> or <ENTER>. If the high nibble is = 0, then only the low nibble has to be entered and terminated with a <SPACE> or <ENTER>. Typed characters may be responded on the terminal screen with Local Echo ON. Typing errors may be corrected with the BACKPSPACE key.

If an invalid hex digit or a wrong number of hex nibbles was entered, this is responded by a question mark '?'.

**Example:** send a NOTE ON message on MIDI channel #3 with chamber pitch 'a' and standard velocity (dec64 = hex40): type as text 92<SPACE>40<SPACE>. Every byte is transmitted immediately after termination.

## **Download:**

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<u>Download "DTERM.ZIP"</u> Program version v3.6, status 25 DEC 2017 (contains "dterm.eee" and this HTML file in PDF format. "dterm.eee" must be renamed to "dterm.exe" before use.)

## → back to menue

<sup>\*</sup> State of information December 2017.

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