

Minitel

Instructions on how to use a Minitel as a Linux terminal.

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Introduction

Found an error or have a suggestion? Please open an issue on GitHub (github.com/poijntfx/minitel):



Figure 1: QR-Code to the source code on GitHub

This document and included source code is Free Culture/Free Software.



Figure 2: Badge of the AGPL-3.0 license

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Compatible Minitels

Your Minitel needs to have a Funz or Fnct key and the DIN-5 port at the back side. This includes the following Minitels:

- Minitel 1B
- Minitel 2
- Alcatel ADF 258

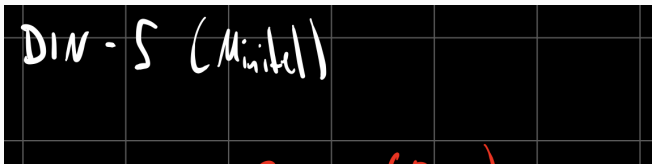
Minitel DIN-5 to USB/RS232/Serial Adapter

Minitel DIN-5 to USB/RS232/Serial Adapter

To build the adapter to connect the Minitel to a PC, you need the following (cheap) components:

- 220 k Ω resistor
- 22 k Ω resistor
- 10 k Ω resistor
- 2N2222 transistor
- Male DIN-5 plug
- PL2303HX USB to UART TTL converter

You will need to check the pinout of the DIN-5 plug/cable; in my case, the following mapping is present:



Minitel Shortcuts

Minitel terminals show the integrated phonebook by default; for them to be usable serial terminals, use the following shortcuts:

French Minitel 1B/2:

1. Fnct + T A: Enables ASCII mode
2. Fnct + T E: Disables local echo
3. Fnct + P 4: Sets baud rate to 4800 Baud (the maximum)

More info can be found on Pila's blog.

Italian Minitel (Alcatel ADF 258):

1. Funz + Mem: Switches to terminal mode
2. Funz + M A: Enables ASCII mode
3. Funz + M E: Disables local echo
4. Funz + B 4: Sets baud rate to 4800 Baud (the maximum)

Testing the Adapter

Testing the Adapter

First, plug the PL2303HX into a USB port on your PC, then run the following:

```
$ sudo stty -F /dev/ttyUSB0 4800 istrip cs7 parenb -parodd b
```

This will initialize the terminal. Now, set up the Minitel using the shortcuts, and try to display something on it:

```
$ echo 'Hello , Minitel!_' | sudo tee /dev/ttyUSB0
```

If the `_` did not print correctly, run the following and try again:

```
$ echo 'ă'' | sudo tee /dev/ttyUSB0 # Fixes # and _ etc.
```

You may use Minicom for further debugging: Start it using `sudo minicom -s -D /dev/ttyUSB0` and use 4800 Baud, 7 data bits, even parity bit, 1 stop bit and disable hardware flow control.

Setting up the Keymap

Alexandre Montaron has worked on improved support for the Minitel on Linux by providing a terminfo file; to get and use it, run the following:

```
$ curl -L -o /tmp/mntl.ti http://canal.chez.com/mntl.ti
$ tic /tmp/mntl.ti -o /etc/terminfo
```

You can also find a mirror on [GitHub Gist](#).

Setting up agetty

Setting up agetty

Using getty, or agetty in our case, it is possible to log into your PC using the Minitel. Exact setup instructions depend on your distribution, but for Fedora 35 the following works; be sure to set up the Minitel using the shortcuts beforehand:

```
$ sudo tee /usr/lib/systemd/system/minitel-getty@.service <<
# SPDX-License-Identifier: LGPL-2.1-or-later
#
# This file is part of systemd.
#
# systemd is free software; you can redistribute it and/or
# under the terms of the GNU Lesser General Public License
# the Free Software Foundation; either version 2.1 of the L
# (at your option) any later version.
```


Setting up tmux

Setting up tmux

tmux makes using the Minitel much more enjoyable by providing support for panes and much more. You can use it by running:

```
$ tmux
```

It should look like this:

