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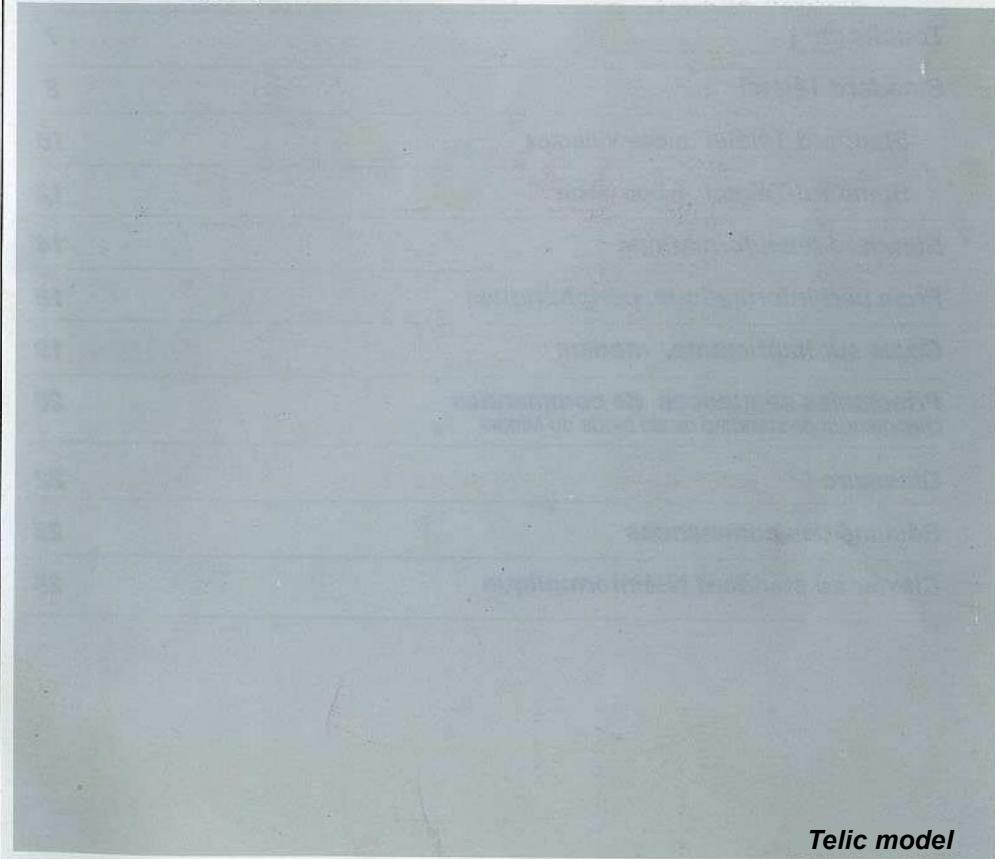


English translation: Pierre Raimbault – 2024

MINITEL 1

Bistandard.

Instructions for professional use



Telic model



Minitel 1 Bistandard

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Minitel 1 Bistandard

Ce Minitel® dispose de deux standards.

Un standard Teletel compatible

Un standard Telematic compatible

Un port de périphériques

Un port de modem

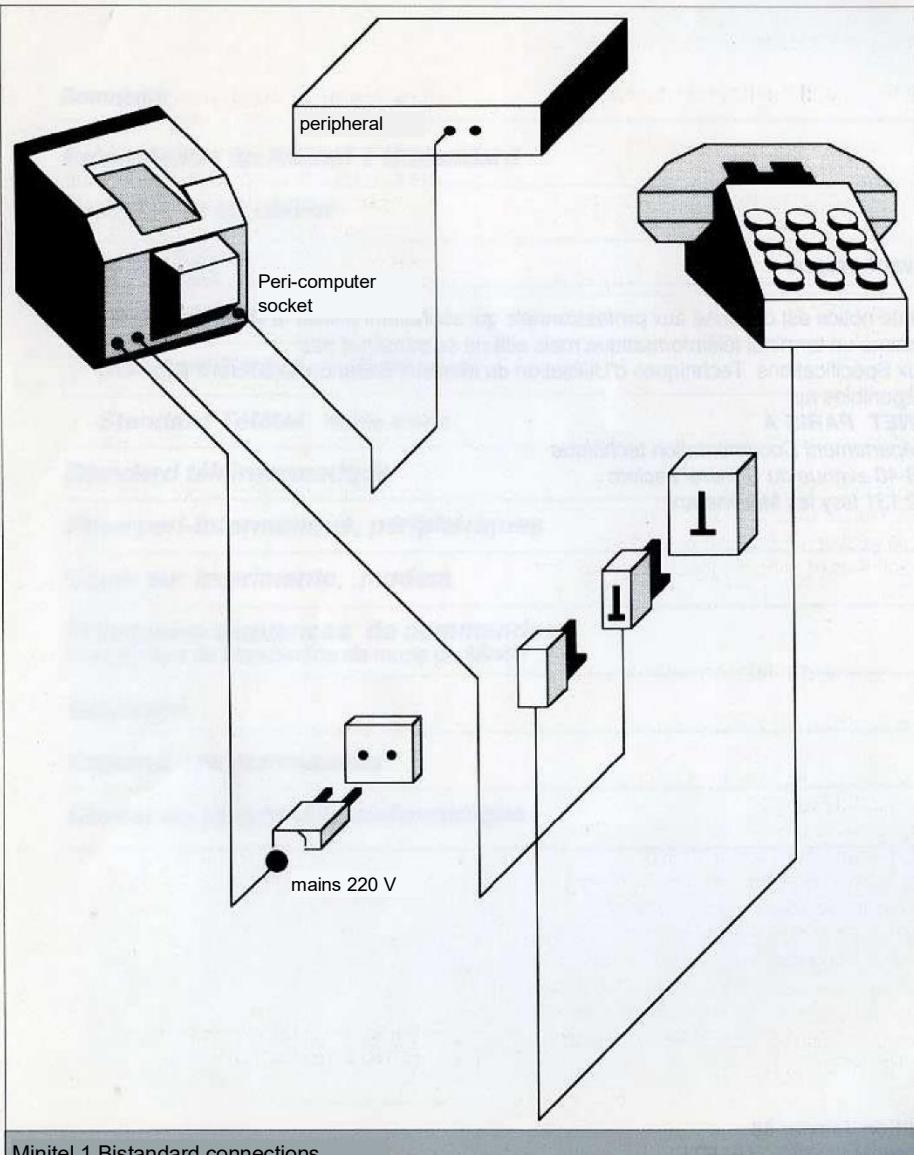
Un port de copieur

Un port de terminal

January 88 edition

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Minitel 1 Bistandard presentation



Minitel 1 Bistandard presentation

This Minitel * has two standards:

A Teletel standard including

- A Videotex mode characterized by:
 - a 40-column Videotex screen;
 - a standard Minitel keyboard with Teletel function key ();
 - a possible use of cursor management and editing keys ().
- A mixed mode characterized by:
 - an 80-column screen (ISO 6429 standard) with two character sets (American ASCII and French ASCII);
 - a keyboard with the cursor management and editing keys enabled and with the Teletel function keys ().

A telematic standard characterized by:

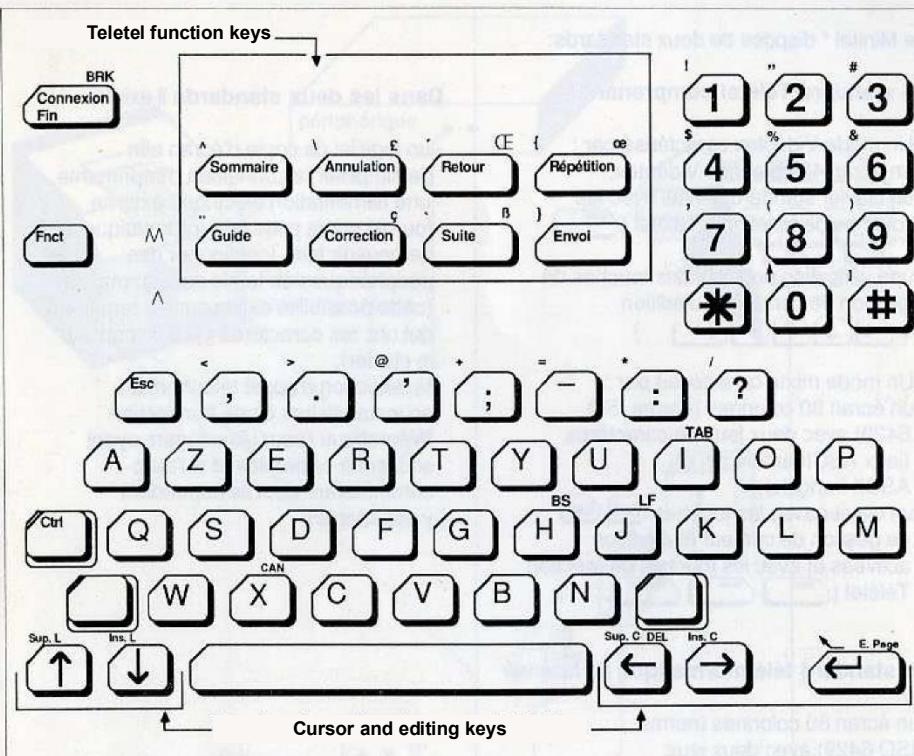
- an 80-column screen (ISO 6429 standard) with two character sets (American ASCII and French ASCII);
(40 column screen possibility in the previously chosen set);
- a keyboard with the cursor management and editing keys enabled and whose Teletel function keys generate sequences other than those of the Teletel standard (the coding corresponds to the function keys of a telecom terminal PF1, PF2, ...).

In both standards there are:

- a screen copy software in order to simplify printer connection,
- an external power supply provided on the peripheral socket in order to be able to operate low-power peripherals (this possibility exists on terminals that have the characters {} ß written on the keyboard);
- detection of pending phone call during a telematics transaction (for users who have subscribed to this service and if the automatic switch on which they depend is adapted to it).

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Keyboard description



The Minitel 1 Bistandard keyboard is divided into:

- function keys;
- writing keys (alphabetic, numeric, punctuation and accent characters);
- cursor management and editing keys.

Each key can be used alone or simultaneously with the **Fnct** key (circled in yellow) or the **Ctrl** key (circled in red).

According to the Teletel or telematic standard and the American ASCII or French ASCII set in telematic mode, some keys may have a different use (see page 26).

The characters engraved on the keys and above the keys in red and yellow correspond to the Teletel standard.

Fnct key

The **Fnct** is a new Minitel key.

Using the **Fnct** key in combination with other keyboard keys allow you to perform **commands** that change the state of the terminal:

- choice of standard;
- modification of certain terminal parameters concerning the keyboard, screen, modem and peripheral socket;
- implementation of screen copying.

Note:

When switched on, the terminal is always in the initial state of the Teletel standard, Videotex mode.

Using **Fnct**

With a letter and a parameter

The **Fnct** key, pressed simultaneously with a letter, initializes a command whose list appears in appendix pages 23, 24 and 25. After releasing the two keys, it is necessary to specify the desired function by a parameter by entering a letter or a number. For example, for the transition to the telematic standard, we have:

Fnct **T** then **A**
simultaneously

NB: Commands made with the **Fnct** key are easily memorizable because the letter pressed simultaneously is the French initial of the part of the Minitel concerned by the command:

C= keyboard, E= screen,
M= modem, P= socket,
T= terminal, I= printing

Similarly, the third key recalls the function:

R= returned (for the modem),
A= American ASCII (for the set),
F= French ASCII (for the set)
M= case sensitive and vice versa (for the keyboard)

With a number

The **Fnct** key, pressed simultaneously with a number from 0 to 9 generates, in Telematic standard, sequences whose list appears below:

| Sequences emitted by the Fnct key followed by a number from 0 to 9 | | | | |
|---|-----|-----|-----|-----------|
| Fnct 0 | 1/B | 4/F | 7/0 | (Esc O p) |
| Fnct 1 | 1/B | 4/F | 7/1 | (Esc O q) |
| Fnct 2 | 1/B | 4/F | 7/2 | (Esc O r) |
| Fnct 3 | 1/B | 4/F | 7/3 | (Esc O s) |
| Fnct 4 | 1/B | 4/F | 7/4 | (Esc O t) |
| Fnct 5 | 1/B | 4/F | 7/5 | (Esc O u) |
| Fnct 6 | 1/B | 4/F | 7/6 | (Esc O v) |
| Fnct 7 | 1/B | 4/F | 7/7 | (Esc O w) |
| Fnct 8 | 1/B | 4/F | 7/8 | (Esc O x) |
| Fnct 9 | 1/B | 4/F | 7/9 | (Esc O y) |

With an unintended key

Pressing the **Fnct** key simultaneously with a key not provided in the list of command combinations or followed by an unintended parameter causes an audible "beep" from the terminal.

Remarks:

- An incomplete command is cancelled by the following actions:

. **Annulation** key;
. wrong parameter;
. other command using the **Fnct** key

- Some commands are "toggle", which means that the same action returns the terminal to the previous state.

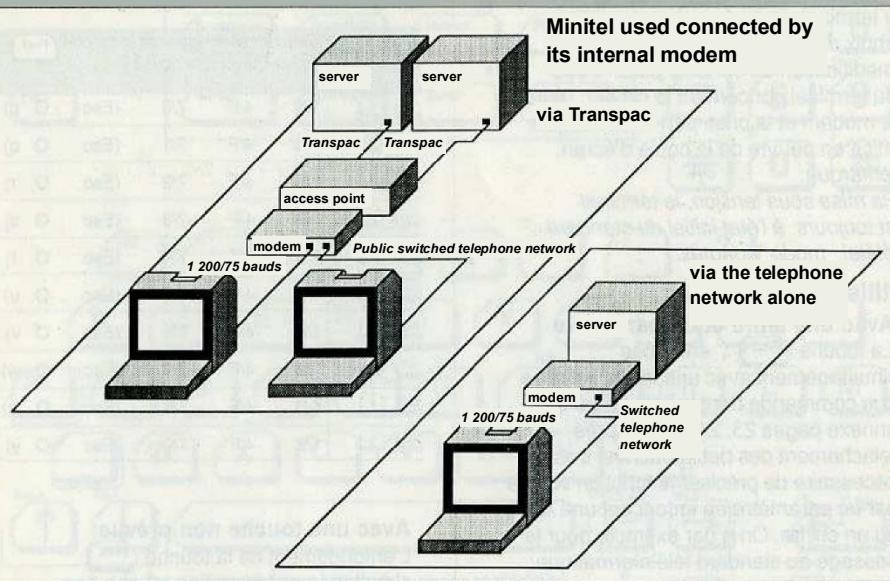
Teletel standard

Teletel standard

Viewing standard: - Videotex in "Videotex mode"
- ISO 6429 in "mixed mode"

Communication protocol: **Teletel**

Connection between Minitel and remote servers



The Minitel 1 Bistandard can call a server

- either via the Télétel access service
- either via the end-to-end switched telephone network

As indicated in the brochure "Minitel 1 Bistandard Mode d'Emploi":

- make the necessary connections (power supply, telephone socket, peripherals);
- turn on the terminal. The letter F should appear at the top right of the screen.

When switched on, your Minitel is in the Teletel standard Videotex mode (40-column screen).

The server or peripheral can switch your Minitel to mixed mode which allows you to have an 80-column screen and one of the two ASCII character sets in the Teletel standard.

Note:

You can return to the standard Teletel Videotex mode, using the command

Fnct **T** then **V**
simultaneously

Teletel standard

The Teletel standard is characterized by the role of the function keys (**Envoyé**, **Sommaire**, **Suite**, ...), which is always the same, regardless of the Videotex or mixed mode.

Videotex mode allows you to consult telematic services (Electronic Directory, Teletel services, ...). When switched on, the terminal is in the initial state of the Teletel standard Videotex mode. By using the commands obtained with the **Fnct** key, you can modify certain characteristics of the terminal.

Changes can also be made using commands sent to the Minitel 1 Bistandard by the access point, the server or the peripheral (see page 20 and 21).

Switching to **mixed mode** can only be controlled by the access point, server or the peripheral. In this mode the screen is in 80 columns with one of the two character sets (American ASCII or French ASCII). The **Ctrl**, **Esc** keys for cursor management and editing are enabled. The function keys are standard Teletel.

Pages 10, 11, 12 and 13 give, by mode, the list of the characteristics of the terminal in the initial state, the possible modifications and the associated commands.

Some features are common to both modes.

Teletel standard function keys Videotex or mixed modes.

The use of the Minitel function keys is indicated by the service that you consult. The most frequently adopted usage is specified in the brochure Instructions for use of the Minitel 1 Bistandard.

NB: Compatibility with X3 PADs

In order to use the Minitel in the Teletel standard in foreign countries through the X3 PADs of the data networks, an ISO 2022 type function key coding option is obtained from the command:

Fnct **T** then **?**
simultaneously

The return to the Teletel standard is made by turning the Minitel off/on.

Teletel standard Videotex mode

Videotex mode initial state of the terminal when switched on or

Fnct **T** then **V**
simultaneously

Keyboard:

initial state

The writing keys are in uppercase mode.
Switching to lowercase mode requires pressing the **C** key with the corresponding letter simultaneously.

modifications

Set the keyboard to lowercase mode.

commands

Fnct **C** then **M**
simultaneously

The cursor and editing keys, **Ctrl** key alone and **Esc** key are inactive, except the carriage return function.

Enable cursor management and editing keys, and **Ctrl, **Esc**.**

Fnct **C** then **E**
simultaneously

Depending on the service consulted, using these keys allows you to move the cursor, go to the line, insert or delete a line or a character.

Automatic repetition of the character by holding the finger on the key is also enabled.

NB:
editing functions are handled by the service.

If the cursor and edit keys are enabled, the codes emitted (except carriage return) are ISO 6429 sequences (CSI sequences)

Send CO set characters for cursor management.

Editing functions are no longer available.

Fnct **C** then **C**
simultaneously

Return to initial state.

Fnct **C** then **C**
simultaneously

Screen:

initial state

Display in 40 columns with Videotex attributes (alphamosaics characters, video inversion, underlining,...) in page mode.

modifications

Put the screen in roll mode.

commands

Fnct **E** then **R**
simultaneously

Return to page mode.

Fnct **E** then **P**
simultaneously

Teletel standard Videotex mode

Modem:

initial state

The transmission/reception speed is:
75/1200 bauds

modifications

Flip the modem to 75/1200 baud to make two Minitels communicate with each other (opposite mode). This operation is only possible from the keyboard in local mode. When the modem is opposite, a small **f** replaces the **F** at the top right of the screen.

commands
Fnct **M** then **R**
simultaneously

Return to initial state.

Connexion Fin
twice
Fnct **T** then **V**
or
simultaneously

Error correction procedure (ECP) is inactive

Activate ECP

Fnct **M** then **C**
simultaneously

Peripheral socket:

initial state

Information from the modem and keyboard is sent to the peripheral port (see page 18 and 19: peripheral port, peripherals and copy to printer).

modifications

Inhibit the socket.
This state is indicated by the display of an **I** at the top right of the screen.

Fnct **P** then **I**
simultaneously

Return to initial state.

Fnct **P** then **I**
simultaneously

The standard speed of exchanges via the socket is 1200/1200 baud.

Change the socket communication speed.

Fnct **P** then **3**
simultaneously

300/300

Fnct **P** then **1**
simultaneously

1200/1200

Fnct **P** then **4**
simultaneously

4800/4800

Terminal:

initial state

The echo is made by the terminal in local mode and by the access point or the server in connected mode.

modifications

Invert echo rule:
Inhibit terminal echo in local mode and enable terminal echo in connected mode.

Fnct **T** then **E**
simultaneously

Return to initial state.

Fnct **T** then **E**
simultaneously

Teletel standard mixed mode

(controlled by server, access point or peripheral, see page 20)

Keyboard:

| initial state | modifications | commands |
|--|--|----------|
| The cursor management and editing keys are enabled. (CSI sequences). | Return to the Videotex keyboard. | |
| Writing in lower case. | Set the keyboard to uppercase mode. | |
| | Return to initial state. | |

Screen:

| initial state | modifications | commands |
|---|-------------------------------------|----------|
| 80-column screen with American ASCII character set or French ASCII. | Put the screen in page mode. | |
| Display in roll mode. | Return to roll mode. | |

Modem:

| initial state | modifications | commands |
|--|---|----------|
| The transmission/reception speed is: 75/1200 bauds | Flip the modem to 75/1200 baud to make two Minitels communicate with each other (opposite mode). This operation is only possible from the keyboard in local mode. When the modem is opposite, a small f replaces the F at the top right of the screen. | |
| | Return to initial state. | |

Error correction procedure (ECP) is inactive

Activate ECP

Teletel standard mixed mode

Peripheral socket:

| initial state | modifications | commands |
|--|---|----------|
| Information from the modem and keyboard is sent to the peripheral port (see page 18 and 19: peripheral port, peripherals and copy to printer). | Inhibit the socket. This state is indicated by the display of an I at the top right of the screen. | |
| | Return to initial state. | |

The standard speed of exchanges via the socket is 1200/1200 baud.

Change the socket communication speed.

| | |
|-----------|--|
| 300/300 | |
| 1200/1200 | |
| 4800/4800 | |

Terminal:

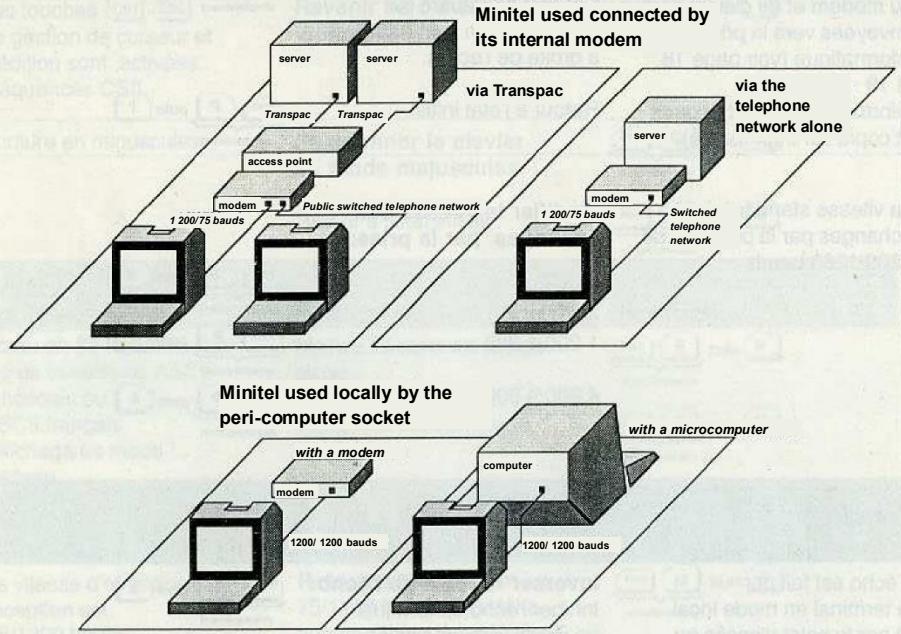
| initial state | modifications | commands |
|---|---|----------|
| The echo is made by the terminal in local mode and by the access point or the server in connected mode. | Invert echo rule: Inhibit terminal echo in local mode and enable terminal echo in connected mode. | |
| | Return to initial state. | |

Telematic standard

Visualization standard: ISO 6429 with American ASCII set and French ASCII set.

Communication protocol: the Teletel communication protocol is no longer active

Connections between Minitel and computers in local or connected mode.



As indicated in the brochure "Minitel 1 Bistandard Instructions for Use":

- establish the necessary connections (power supply, telephone socket, peripherals);
- turn on the terminal. The letter **F** should appear at the top right of the screen;
- if you work locally, which means that your Minitel is connected via the peripheral socket to a microcomputer for example, simultaneous two-way exchanges are permitted;
- if you work online, which means that your Minitel is connected, via its internal modem, with a remote server

or an access point, the peripheral socket then only allows one-way exchanges and behaves like a printer output interface.

Whether you are working locally or online, switching to the telematic standard can be controlled:

- either by the access point, the server or the peripheral (see page 21).
- either from the keyboard:

Fnct **T** then **A** (American ASCII set)
simultaneously

Fnct **T** then **F** (French ASCII set)
simultaneously

Telematic standard

The telematic standard allows you to consult databases that comply with the ISO 6429 standard. When entering the telematic standard, the terminal is in a defined initial state. By using the commands obtained with the **Fnct** key, you can modify certain characteristics of the terminal.

In the telematic standard, the Teletel function keys generate sequences other than in the Teletel standard (the coding corresponds to the function keys of a telematic terminal).

Codes emitted by function keys

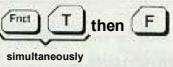
| | | | | |
|------------|-------|-----|-----|-----|
| Sommaire | (PF1) | 1/B | 4/F | 5/0 |
| Annulation | (PF2) | 1/B | 4/F | 5/1 |
| Retour | (PF3) | 1/B | 4/F | 5/2 |
| Répétition | (PF4) | 1/B | 4/F | 5/3 |
| Envoi | | 1/B | 4/F | 4/D |
| Correction | | 1/B | 4/F | 6/C |
| Guide | | 1/B | 4/F | 6/D |
| Suite | | 1/B | 4/F | 6/E |

To obtain the codes corresponding to:

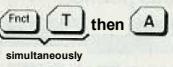
| To obtain the codes corresponding to: | Press simultaneously on |
|---------------------------------------|--------------------------|
| LF (line feed) | 0/A Ctrl J |
| BS (backspace) | 0/8 Ctrl H |
| TAB (horizontal tabulation) | 0/9 Ctrl I |
| VT (vertical tabulation) | 0/B Ctrl K |
| DEL (erase character) | 7/F Ctrl ← |
| CAN (erase line) | 1/8 Ctrl X |
| CR (carriage return) | 0/D ← |

Telematic standard

French ASCII set (80 columns by default)



American ASCII set (default 80 columns)



Keyboard:

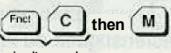
initial state

modifications

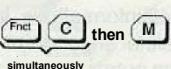
commands

The writing keys are in lowercase mode.
Switching to uppercase mode requires pressing the  key with the corresponding letter simultaneously.

Set the keyboard to uppercase mode.



Return to initial state.



The cursor management and editing  keys are enabled.

NB:
editing functions are handled by the service.

All command characters in the CO game are possible by combining the  key and certain keyboard keys (see page 15).

Screen:

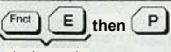
initial state

modifications

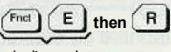
commands

The screen is in scroll mode, which means that at the end of the screen page, an automatic scrolling of the screen upwards (except the 0 row) allows you to continue writing beyond.

Put the screen in page mode.

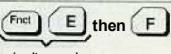


Return to roll mode.



The screen is in 80 columns ISO 6429 standard with American ASCII set or a French ASCII set.

Set the screen to 40 columns.
(in the initially selected set)



Return to initial state.



Telematic standard

Modem:

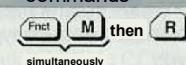
initial state

modifications

commands

The transmission/reception speed is:
75/1200 bauds

Flip the modem to 75/1200 baud to make two Minitels communicate with each other (opposite mode). This operation is only possible from the keyboard in local mode. The modem status will be preserved when changing the standard.



Remarks:

- The PCE, if it has been activated in the Teletel standard, remains in service after switching to the telematic standard.
- No modem settings are changed when switching from one standard to another.

Return to initial state.

twice 

Peripheral socket:

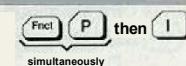
initial state

modifications

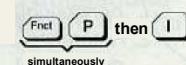
commands

Local Minitel: simultaneous two-way exchanges (uninhibited socket). Minitel connected: one-way exchanges. The socket is then an output interface for printer (inhibited socket).

Change the socket inhibition status.
Inhibit the socket locally or disable it when connected.

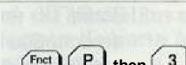


Return to initial state.

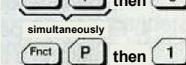


The standard speed of exchanges via the socket is 1200/1200 baud.

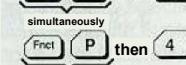
Change the socket communication speed.
300/300



1200/1200



4800/4800



Terminal:

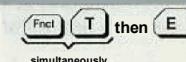
initial state

modifications

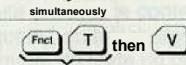
commands

The echo is made by the terminal in local mode and by the access point or the connected service.

Invert echo rule:
Inhibit terminal echo in local mode and enable terminal echo in connected mode.
Return to initial state.



Return to standard Teletel Videotex mode



Peri-computer socket, peripherals

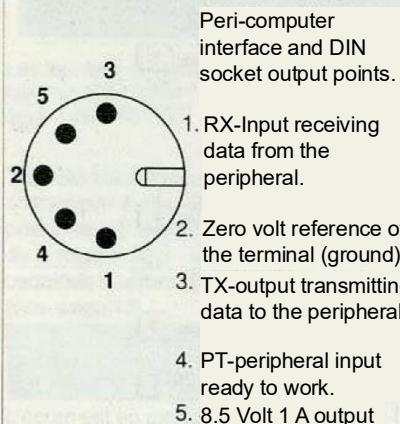
This is a 5-pin DIN socket whose electrical levels are of the Open Collector TTL type.

Three transmit/receive (symmetrical) speeds are available:

300,1200 and 4800 baud.

You can connect to the peri-computer socket (or DIN socket), a microcomputer, a printer, a memory card reader or any other peripheral.

female socket, exterior view



In telematic standard

- If the Minitel is connected, the exchanges via the socket are unidirectional. The socket is intended in this case to receive a printer.
- If the Minitel is in local mode, the exchanges via the socket are simultaneous bidirectional. Protocol commands on the socket are no longer available.

In Teletel standard

The exchanges via the socket are bidirectional and simultaneous. You may need, depending on the connected peripherals, and regardless of the standard or mode, to inhibit the socket. You then have the command:

Fnc1 **P** then **I**
simultaneously

The removal of the inhibition is done by the same command.

The standard speed of exchanges through the socket is 1200-1200 baud. You can change this speed with:

Fnc1 **P** then **3** : 300/300
simultaneously
Fnc1 **P** then **1** : 1200/1200
simultaneously
Fnc1 **P** then **4** : 4800/4800
simultaneously

Changing speed is done by making a new choice.

Copy to printer, modem

Copy to printer

Printing or screen copying is a special case of using a peripheral plugged into the peri-computer socket.

Situations vary depending on the mode (Videotex or telematic) and the printer type you have.

Videotex mode

If you have a videotex compatible printer, i.e. reproducing semi-graphic characters with their attributes, follow the printer's operating instructions.

In both standards

If you have a standard printer, you can also copy a screen, after inhibiting the socket by the commands indicated below.

There will be loss of Videotex graphics and attributes if you are in Videotex mode.

To disable the socket: **Fnc1** **P** then **I**
simultaneously

To copy a screen
(40 or 80 columns):

Fnc1 **I** then **F**
simultaneously

If the printer works with a French ASCII set

Fnc1 **I** then **A**
simultaneously

If the printer works with an American ASCII set

To stop a copy in progress, use the **Annulation** Key.

NB:

Regardless of the standard and type of printer, printing is limited to the screen being viewed. This is a simple screenshot. In addition, printing is done in 40 or 80 columns, depending on the choice you made earlier for the screen format.

Row 0 is not printed.

Modem

This is a modulation modem respecting the CCITT V23 frequency recommendation.

In its initial state the internal modem receives information at a speed of 1200 baud and transmits at 75 baud.

The transmission-reception exchanges are made simultaneously in both directions. This modem is reversible. It can therefore transmit at 1200 baud and receive at 75 baud.

There are two possibilities:

- The modem is flipped when connected to an access point, server or peripheral.
- The modem is flipped locally from the keyboard: **Fnc1** **M** then **R**
simultaneously

or from the peripheral.

Examples of using flip in the Teletel standard

- Use of Minitel in association with a memory card reader.

This one, considered as a peripheral, will command the internal modem's flipping by sending a specific sequence.

The card will then send the contents from its memory to the central computer.

After acknowledging the information reception, the remote computer will, in turn, send a sequence requesting the modem to be flipped, before issuing a response.

- Use of Minitel in association with a microcomputer.

The modem flip is particularly interesting when you want to send the contents of a floppy disk, or download a program, text or data to another computer.

Main command sequences

(changing the Minitel standard or mode)

Teletel standard

In the Teletel standard, switching to mixed mode can only be controlled from the access point and the server (via the modem) or the peripheral (via the peripheral socket).

Switching from the Videotex mode to the mixed mode

| Received commands | | | Acquittals | | |
|-------------------|-------------|-----------------|-------------------|--------|-------|
| | | | Emitted sequences | socket | modem |
| Minitel locally | from socket | 1/B 3/A 3/2 7/D | 1/3 7/0 | ● | |
| Minitel connected | from modem | 1/B 3/A 3/2 7/D | 1/3 7/0 | ● | ● |
| | from socket | 1/B 3/A 3/2 7/D | 1/3 7/0 | ● | ● |

Switching from the mixed mode to the Videotex mode

| Received commands | | | Acquittals | | |
|-------------------|-------------|-----------------|-------------------|--------|-------|
| | | | Emitted sequences | socket | modem |
| Minitel locally | from socket | 1/B 3/A 3/2 7/E | 1/3 7/1 | ● | |
| Minitel connected | from modem | 1/B 3/A 3/2 7/E | 1/3 7/1 | ● | ● |
| | from socket | 1/B 3/A 3/2 7/E | 1/3 7/1 | ● | ● |

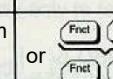
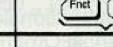
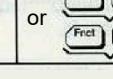
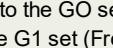
Main command sequences

(changing the Minitel standard or mode)

Telematic standard

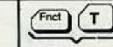
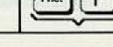
Switching from the Teletel standard to the telematic standard can be done from the keyboard but also from the access point and the server (via the modem) or from the peripheral (via the peripheral socket).

Switching from the Teletel standard to the telematic standard

| Received commands | | | Acquittals | | |
|-------------------|---------------|---|-------------------|--------|-------|
| | | | Emitted sequences | socket | modem |
| Minitel locally | from socket | 1/B * 3/A 3/1 7/D | 1/B 5/B 3/F 7/A | ● | |
| | from modem | or  or  | 1/B 5/B 3/F 7/A | ● | |
| Minitel connected | from modem | 1/B * 3/A 3/1 7/D | 1/B 5/B 3/F 7/A | | ● |
| | from socket | 1/B * 3/A 3/1 7/D | No acquittal | | |
| | from keyboard | or  or  | No acquittal | | |

* This command switches to the GO set (American ASCII set); switching from the GO set (American ASCII set) to the G1 set (French ASCII set) is done by SO (0/E) and returning from G1 to GO by SI (0/F).

Switching from the Telematic standard to the Teletel standard in Videotex mode

| Received commands | | | Acquittals | | |
|-------------------|---------------|--|-------------------|--------|-------|
| | | | Emitted sequences | socket | modem |
| Minitel locally | from socket | 1/B 5/B 3/F 7/B | 1/3 5/E | ● | |
| | from keyboard | or  | 1/3 5/E | ● | |
| Minitel connected | from modem | 1/B 5/B 3/F 7/B | 1/3 5/E | ● | ● |
| | from keyboard | or  | 1/3 5/E | ● | ● |

Glossary

ASCII

American Standard Code for Information Interchange. A standardized 7-bit encoding for transmitting information.

CCITT Recommendation V23

Technical recommendation of the International Telegraph and Telephone Consultative Committee, a standards body, defining the characteristics of the 1200/75 baud asymmetric modem used by European Videotex terminals.

Baud

Unit of measurement of telecommunications flow rates expressed in bits/second (bps).

Local echo

Local echo is active when a character typed on the keyboard is simultaneously transmitted and displayed directly on the screen.

CSI set

(Character Command Introduction)
Command sequences defined in ISO 6429.

CO set

Videotex standard command set (CEPT 2).

Videotex mode

Teletel standard mode characterized by:

- a 40-column screen,
- a standard Minitel keyboard with Teletel function keys (),
- possible use of cursor management and editing keys
- (keys by keyboard extension).

Mixed mode

Teletel standard mode characterized by:

- a 40-column screen (ISO 6429 standards) with two character sets (American ASCII and French ASCII),

- a keyboard with the
- keys and cursor management and editing keys enabled and with the Teletel function keys ().

Modem

The modem performs modulation and demodulation functions, i.e. the conversion of binary digital signals (used by the Minitel microprocessor) into modulated analog signals (transmitted over the telephone line) and vice versa.

ISO 6429 standard

International standard defined by the "International Organisation for Standardisation" on the information processing system.

Error Correction Procedure (ECP)

Procedure which aims to correct errors due to disturbances on the telephone network receiving at 1200 baud.

Telematic standard

Standard characterized by:

- an 80-column screen (ISO 6429 standard) with two character sets (American ASCII and French ASCII), with the possibility of a 40-column screen in the previously selected set,
- a keyboard with keys and cursor management and editing keys enabled and whose Teletel function keys generate sequences other than standard Teletel (the coding corresponds to the function keys of a telecom terminal PF1, PF2, etc.).

Teletel standard

Standard including these modes: Videotex mode and mixed mode.

Commands summary Teletel standard Videotex mode

Commands and parameters definitions

When switched on, the Minitel is in the Teletel standard, Videotex mode

| | <i>initial state</i> | <i>modifications</i> | <i>commands</i> |
|--------------------------|-----------------------------|--|--|
| Keyboard | Uppercase writing | Lowercase lock Return to initial state | |
| | | Cursor management and editing keys disabled. No auto-repeat | |
| | | CSI codes for editing keyboard | CO codes if in "extended keyboard" |
| | | | Return to standard Videotex keyboard |
| Screen | Screen is in page mode | Screen in roll mode Return to page mode | |
| Modem | ECP is disabled | ECP activation request 1200/75 baud speed Modem flip at 75/1200 baud Return to initial state | |
| Peripheral socket | All data sent to the socket | Disable the socket Return to initial state | |
| | | Screen copy (after disabling the socket) | |
| | | 1200/1200 baud speed | Change speed 300/300 1200/1200 4800/4800 |
| Terminal | | Return to Videotex mode standard Echo activated by terminal (locally) or service (connected) | |
| | | Disable or request echo | |

Commands summary Teletel standard mixed mode

| | <i>initial state</i> | <i>modifications</i> | <i>commands</i> |
|--------------------------|--|---|------------------------------------|
| Keyboard | The cursor management and editing Ctrl , Esc keys are enabled. | Return to standard Videotex keyboard | Fnct C then V |
| | Lowercase writing | Uppercase lock | Fnct C then M |
| Screen | 80 column screen, roll mode | Return to initial state | Fnct C then M |
| | | Screen in page mode | Fnct E then P |
| Modem | ECP disabled 1200/75 baud speed | Return to initial state | Fnct E then R |
| | | ECP activation request | Fnct M then C |
| | | Modem flip at 75/1200 baud | Fnct M then R |
| Peripheral socket | All data sent to the socket | Return to initial state | Fnct T then V |
| | | Disable the socket | Fnct P then I |
| | Screen copy (after disabling the socket) 1200/1200 baud speed | Return to initial state | Fnct P then I |
| | | Screen copy (after disabling the socket) | Fnct I then A |
| | | Change speed | Fnct I then F |
| Terminal | 300/300 1200/1200 4800/4800 | 300/300 | Fnct P then 3 |
| | | 1200/1200 | Fnct P then 1 |
| | | 4800/4800 | Fnct P then 4 |
| | Return to Videotex mode standard | Fnct T then V | |
| | Echo activated by terminal (locally) or service (connected) | Disable or request echo | Fnct T then E |

NB:

Commands made with the **Fnct** key are easily memorizable because the letter pressed simultaneously is the French initial of the part of the Minitel concerned by the command:

C= keyboard, E= screen,
M= modem, P= socket,
T= terminal, I= printing

Similarly, the third key recalls the function:

R= returned (for the modem),
A= American ASCII (for the set),
F= French ASCII (for the set)
M= case sensitive and vice versa (for the keyboard)

Commands summary Telematic standard Commands and parameters definition

Switching to the telematic standard:

- French ASCII set (80 columns by default):

Fnct **T** then **F**

- American ASCII set (default 80 columns):

Fnct **T** then **A**

| | <i>initial state</i> | <i>modifications</i> | <i>commands</i> |
|---|--|---|------------------------------------|
| Keyboard | Lowercase writing | Uppercase lock | Fnct C then M |
| | | Return to initial state | Fnct C then M |
| Screen | Screen in roll mode | Screen in page mode | Fnct E then P |
| | | Return to initial state | Fnct E then R |
| Peripheral socket | Display in 80 columns | Display in 40 columns | Fnct E then F |
| | | Return to initial state | Fnct E then F |
| Terminal | Enabled socket in local mode Disabled socket when connected | Enabling or disabling the socket | Fnct P then I |
| | | Return to initial state | Fnct P then I |
| | | Screen copy (after disabling the socket) | Fnct I then A |
| | 1200/1200 baud speed | Change speed | Fnct I then F |
| | | 300/300 | Fnct P then 3 |
| | | 1200/1200 | Fnct P then 1 |
| | | 4800/4800 | Fnct P then 4 |
| Return to Videotex mode standard | Fnct T then V | | |
| Echo activated by terminal (locally) or service (connected) | Disable or request echo | Fnct T then E | |

NB:

Commands made with the **Fnct** key are easily memorizable because the letter pressed simultaneously is the French initial of the part of the Minitel concerned by the command:

C= keyboard, E= screen,
M= modem, P= socket,
T= terminal, I= printing

Similarly, the third key recalls the function:

R= returned (for the modem),
A= American ASCII (for the set),
F= French ASCII (for the set)
M= case sensitive and vice versa (for the keyboard)

Keyboard in telematic standard

| Keyboard action | | On-screen display or emitted codes | | | | | |
|-------------------------------|--------------------|------------------------------------|---|------------------|-----------------------------|------------------|---|
| Keyboard key | Alone | | with key | | with key | | |
| | American ASCII set | French ASCII set | American ASCII set | French ASCII set | American ASCII set | French ASCII set | |
| Function keys | Envoi | 1/B 4/F 4/D | } | (*) | è | | |
| | Retour | 1/B 4/F 5/2 | | | | | |
| | Répétition | 1/B 4/F 5/3 | { | (*) | é | | |
| | Guide | 1/B 4/F 6/D | | | " | | |
| | Annulation | 1/B 4/F 5/1 | \ | | ç | | £ |
| | Sommaire | 1/B 4/F 5/0 | | | | | |
| | Correction | 1/B 4/F 6/C | | | § (*) | | ç |
| | Suite | 1/B 4/F 6/E | | | | | |
| | Connexion | 1/B 2/9 3/4 0/D | 1/B 2/9 3/4 0/D | | Socket or modem break | | |
| Writing keys | A to Z | a to z (lowercase) | A to Z (uppercase) | | 01 to 1A | | |
| | Space bar | space | space | | space | | |
| | , | , | < | | 1/C | | |
| | - | . | > | | 1/E | | |
| | ' | , | @ | à | 0/0 | | |
| | : | : | + | | 0/B | | |
| | : | : | = | | 1/D | | |
| | : | : | * | | 0/A | | |
| | ? | ? | / | | 1/F | | |
| | 1 | 1 | ! | { (*) | é | | |
| | 2 | 2 | " | | í | ù | |
| | 3 | 3 | # | £ | } (*) | è | |
| | 4 | 4 | \$ | ~ (*) | | " | |
| | 5 | 5 | % | | | | |
| Cursor management and editing | 6 | 6 | & | | | | |
| | 7 | 7 | , | | | | |
| | 8 | 8 | (| | | | |
| | 9 | 9 |) | | | | |
| | 0 | 0 | ↑ | | | | |
| | * | * | [| | | | |
| | # | # | £ | § (*) | | | |
| | → | 1/B 5/B 4/3 cursor at right | 1/B 5/B 3/4 6/8 character insertion start | | | | |
| | ← | 1/B 5/B 4/4 cursor at left | 1/B 5/B 3/4 6/C character insertion end | | | | |
| | ↑ | 1/B 5/B 4/1 cursor at top | 1/B 5/B 5/0 delete character | 7/F | | | |
| | ↓ | 1/B 5/B 4/2 cursor at bottom | 1/B 5/B 4/D delete line | DEL | | | |
| | ↔ | 0/D carriage return | 1/B 5/B 4/D insert line | | | | |
| | | | 1/B 5/B 4/8 home | | 1/B 5/B 3/2 4/A delete page | | |

(*) For terminals lacking the characters {, }, ß, §, ~, the display will be an approximate character or —