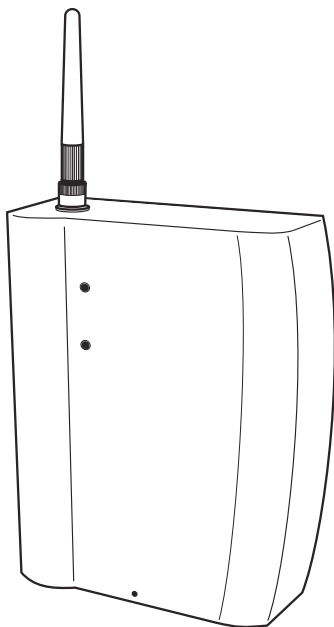


BASIC GUIDE to the Digital Terminal MODEL RT30F - PCS



Welcome to the world of the SAGEM SA local radio loop. We congratulate you on your purchase of a GSM digital terminal SAGEM RT-30.

We would like to draw your attention to the fact that this GSM terminal has been approved in accordance with the relevant European Standard. To get the most out of your digital terminal and the services associated with it, we recommend that you carefully read through this Basic Guide and keep it near your digital terminal.

PLEASE NOTE

Depending on the configuration of the networks and the associated conditions of subscription, some functions may not be available (these are indicated by an asterisk *).

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GENERAL RECOMMENDATIONS



This equipment has to be imperatively installed, tested and serviced by qualified personnel. Before opening the equipment, always unplug all connectors and read carefully all safety instructions. After installation or service, the cover must imperatively be closed and fastened to base with the tie or the screw provided by the manufacturer, in order to ensure end user safety against electric shocks.

No operator serviceable parts. Refer servicing to qualified personnel. To prevent electric shocks, do not remove cover.

Safety instructions

Do not allow a child to play with your terminal. He could be injured if he tries to take it apart (aerial, etc.).



Electronic medical equipment

As with any device which uses radio frequencies, a cellular terminal may adversely affect the operation of some types of electronic medical equipment if they are not adequately shielded against interference. This may also apply to medical devices which are carried in or on the human body (including some types of cardiac stimulator and hearing aids) and appliances used in the home (dialysis machines in particular).

Contact your doctor or the manufacturer of the device in order to find out whether any special precautions should be taken.



Potentially explosive areas

Although it can only happen under exceptional circumstances, your terminal or its accessories are capable of generating sparks which could, in turn, cause an explosion or start a fire in some potentially hazardous locations (filling stations, etc.). It may also interfere with remotely-controlled explosive triggering devices, in quarries for example. We therefore strongly recommend that you do not install your terminal in any of these locations.

The use of your equipment is subject to safety regulations, which are designed to protect the user and his environment.

GENERAL RECOMMENDATIONS

Electrical safety

Do not install the terminal in a damp room, bathroom, laundry room or in a kitchen within 1.5 metres of the sink.

This terminal should be used at temperatures between 5°C and 40°C.

In districts which are subject to frequent storms, use a suitable surge arrester to protect the terminal against electrical overloads.

Electrical connection: 230 V mains power supply, single-phase alternating current, with the exception of IT installations as defined in Standard EN 60-950.

Note: As an option, you may have a 110V power supply instead of 230V version.

Before powering on your unit, make sure the mains outlet it is connected to, meets the requirement printed on the warning label on the separate power supply (voltage, current, frequency of power network).

Note: the mains power supply voltage is classified as excessive according to the criteria of Standard EN 41-003. As a precaution, in the event of danger, mains adapters should act as circuit breakers to isolate the 230 V or 110 V or power supply. They must be located near the terminal and must be easily accessible.

The equipment must only be used with the mains adapter supplied.

In Europe, this unit includes the  stamp, following the 73/23/EEC, 89/336/EEC and 93/68/EEC directives.

Telephone line connection: The telephone line is classified as TNV-2 according to EN 60950. Therefore, the line must not be installed outside the building.

Compatibility with your phone

Before connecting your phone to your digital terminal, check the documentation supplied with the terminal for any information relating to safety.

Make sure that you only connect the terminal to approved phones and in accordance with current regulations.

Problems with interference

The terminal is a transmitter which uses radio frequencies. For this reason it may sometimes receive and generate interference which may adversely affect its own performance as well as the performance of other electrical equipment in the immediate vicinity (terminals, television sets, microcomputers, etc.).

Make sure that you carefully follow the instructions for connecting your terminal to the mains power supply.

Recommendations for emergency numbers

The terminal operates with the aid of radio signals on cellular and terrestrial networks. For this reason, it is not possible to guarantee that every call will be put through. In addition, you cannot rely solely on a wireless device for urgent communications (medical emergencies for example).

FCC Recommendations Safety information for Wireless local loop Terminal

Use of your Terminal is subject to safety rules designed to protect the user and his or her environment.

Exposure to Radio Frequency Signals

Your Wireless local loop Terminal is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for Wireless Terminal. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992)*

NCPR Report 86 (1986)*

ICNIRP (1996)*

(*) American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection.

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

Safety Operation Requirement

Do not operate your Phonecell when any person is within 20 cm of the antenna.

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the Terminal and may violate FCC regulations.

Phone Operation

Tips on efficient operation: for your Terminal to operate most efficiently: do not touch the antenna unnecessarily when the Terminal is in use. Contact with the antenna affects call quality and may cause the Terminal to operate at a higher power level than otherwise needed.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your Wireless Terminal

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6") inches be maintained between a Wireless Terminal and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON;
- If you have any reason to suspect that interference is taking place, turn your Terminal OFF immediately.

Hearing Aids

Some digital Wireless Terminal may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Turn your Terminal OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Posted Facilities

Don't install your Wireless Terminal in any facility where posted notices so require.

Blasting Areas

To avoid interfering with blasting operations, Don't install your Wireless Terminal when in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Potentially Explosive Atmospheres

Don't install your Wireless Terminal when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include fueling areas such as gasoline stations; below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

Electrical Safety

Only use the appropriate chargers recommended in the manufacturer's catalog. Using another charger may prove dangerous and could invalidate the warranty of your Wireless Terminal.

The main power socket should be easily accessible.

Make sure that the main voltage corresponds to the level marked on the charger identification plate.

General Precautions

Do not try to open your Wireless Terminal and repair it yourself. The manufacturer cannot be held liable for any resulting damage.

Any work done by an unqualified and unauthorized person will invalidate your warranty.

Do not install your Wireless Terminal in humid places (bathroom, swimming pool, etc.). Protect it from splashing water and other liquids.

Do not expose your Wireless Terminal to extreme temperatures.

Keep your Wireless Terminal out of reach of small children. Do not allow them to play with it, it is not a toy. Only use your Wireless Terminal with original accessories. Failure to comply with these rules will invalidate your warranty.

Remember to disconnect the charger before removing the battery.

The physical and chemical processes used in rechargeable batteries mean that temperature limits must be followed during rapid charging. Your Terminal automatically protects the batteries from extreme temperatures.

If the Wireless Terminal is disconnected from the battery for an extended period of time, it will lose the time and the recorded messages.

WARNING

The manufacturer cannot be held liable for any failure to comply with the above recommendations or for any misuse.

Emergency Calls

IMPORTANT

This Wireless Terminal, like any PCS phone, operates using radio signals, PCS and landline networks, and user-programmed functions. As a consequence a connection in all conditions cannot be guaranteed. Therefore you should never rely solely upon any PCS phone for essential communications (e.g. medical emergencies).

To make or receive any calls, this phone must be switched on and in service area with adequate PCS signal strength. Emergency calls may not be possible on all PCS networks or when certain network services and/or phone features are in use. Check with local Service Providers.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your PCS Wireless Terminal may be the only means of communication at the scene of an accident - do not terminate the call until given permission to do so.

If certain features are in use (such as Keyguard), you may first need to turn those features off before you can make an emergency call. Consult this manual and your local PCS Service Provider.

Emergency Calling

If the phone is not on, press .

Key in emergency number for your present location (e.g. 911 or other official emergency number).

Press .

If you dial 911 during a call, the phone terminates the current call and attempts to make a call to the emergency number 911.

FCC/INDUSTRY CANADA NOTICE

Your Wireless Terminal may cause TV or radio interference (e.g. when using telephone in close proximity of receiving equipment). The FCC/INDUSTRY CANADA can require you to stop using your Wireless Terminal if such interference cannot be eliminated. If you need assistance, contact your local dealer.

This device complies with parts 24 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interferences.

YOUR TERMINAL

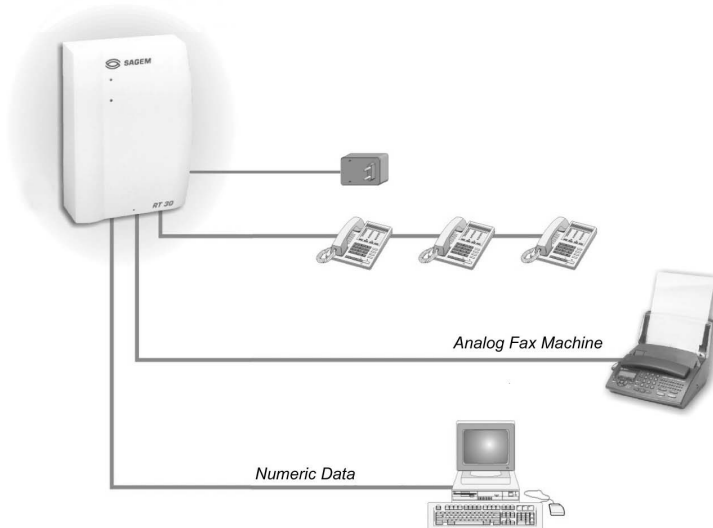
Your box contains

- One digital terminal SAGEM RT-30 with a backup battery enclosed
- One power adapter
- One basic guide.
- One line cable.
- One installation kit.

Description of your terminal

Your terminal connects the subscriber to the network over a radio link (GSM radio standard). It is located on the subscriber's premises and installed on the wall. The figure below shows the possible connections of your terminal:

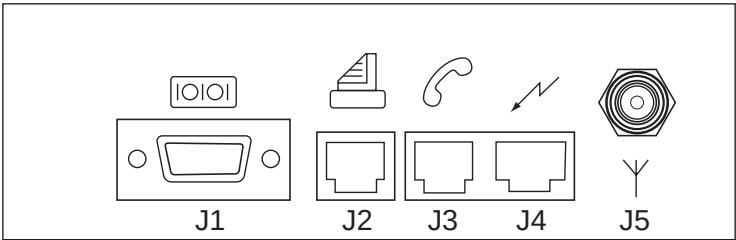
- 1 to 3 standard telephones
- Analog G3 fax machine
- Digital terminal (PC or fax machine)
- Power supply adapter
- External antenna, optional
- 2 screws and plugs for fixing the terminal on the wall.



YOUR TERMINAL

Connectors

The figure below gives the location of each connector.



The table below gives the meaning of each connector.

Connector	Type	Connection for
J1	Data 9 points, RS232	PC or digital fax machine
J2	RJ11 female	Fax machine
J3	RJ11 female	Phone
J4	RJ45 female	Power adapter
J5	TNC / BNC or mini UHF	External antenna if needed

YOUR TERMINAL

Lamps

The tables below give the meaning of the 2 lamps on the front panel.

Upper lamp (red)

Status	Function
Off	Call forward inactive
On	Call forward active
Slow flashing	SMS or voice mail notification
Rapid flashing	Searching network or network not available

Lower lamp (green: operating with power supply, red: operating with backup battery, depending on model)

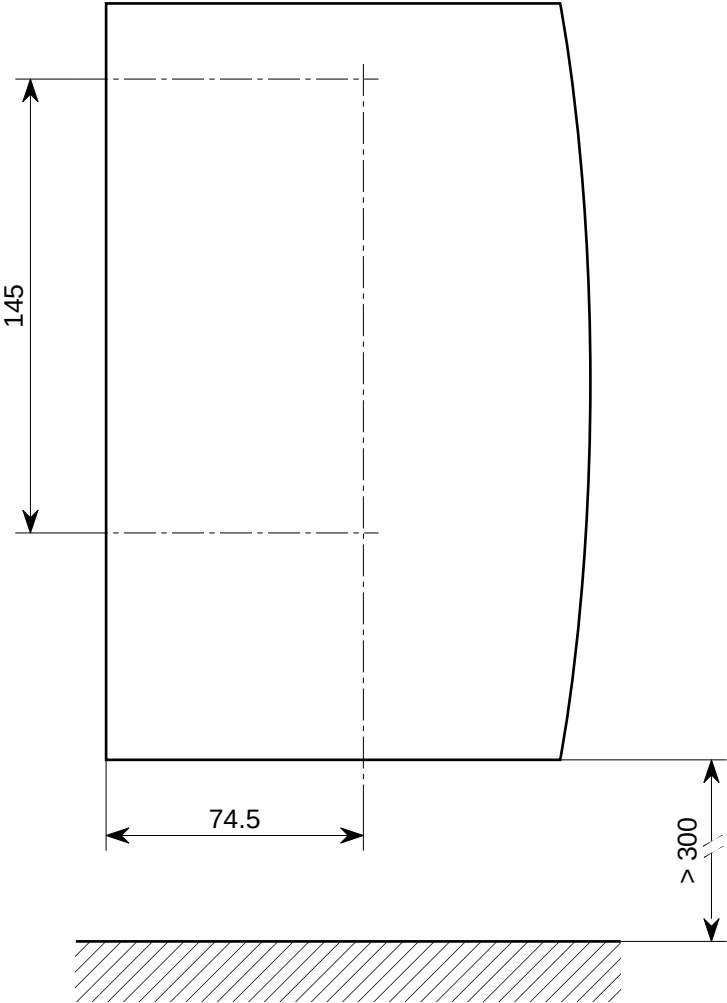
Status	Function
Off	Power off
On	Power on
Slow flashing	Off hook
Rapid flashing	SIM card missing or waiting for PIN code entry

Battery

A battery backup is integrated in your terminal, it is disconnected after the factory tests and for storage. You are required to connect it.

With the battery, in case of mains failure your terminal works properly during 1 hour (talk time) or 6 hours (stand-by). Dependent on operating conditions and network configuration.

INSTALLING AND USING THE TERMINAL FOR THE FIRST TIME



Dimensions in mm

INSTALLING AND USING THE TERMINAL FOR THE FIRST TIME

Installing your terminal

Where should you install your terminal?

In order to prevent any interference between your terminal and other electrical equipment in the immediate vicinity (phones, television sets, microcomputers, etc.), which could result in extraneous noise, make sure that you **install your terminal at a distance of at least 2 m from any of these types of equipment.**

However, if there is no sign of any interference, you can reduce this distance.

Distance between your phone and the terminal

Make sure that, **when your phone is connected to the terminal, the distance between them is at least 2 m.** If you become aware of interference, move the phone and its cord further away from the terminal, until the interference disappears.

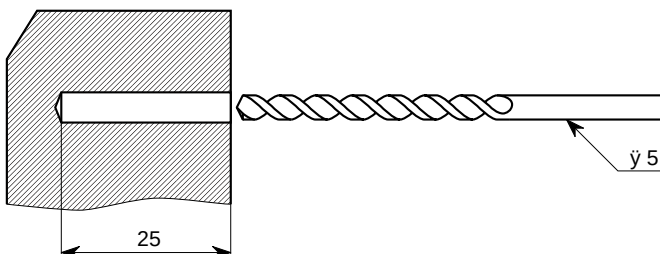
Wall installation

Required tools

- One hammer drill + set of drills
- One 500 mm spirit level
- One flat blade screwdriver
- One 2-meter tape measure.

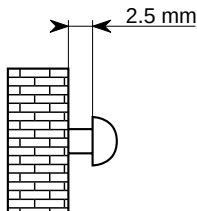
Procedure:

1. Mark out the positions of the fixing holes, either using the drilling template (part of the packaging: cut it) or by marking two points 145 mm apart in a vertical line. Vertical attachment 300 mm from the ground (terminal low point) (see Figure on opposite page).
2. Check the vertical alignment of the points using the spirit level.
3. Drill to a diameter of 5 mm and a depth of 25 mm.



INSTALLING AND USING THE TERMINAL FOR THE FIRST TIME

4. Fit the expansion plug supplied with the terminal.
5. Insert the two screws in the plugs, leaving a 2.5 mm minimum space between the wall and the screw head.



6. Offer up the backplate (the keyholes) to the two screwheads, position the backplate on the screws and slide it down.
7. Moderatly tighten the bottom screw to prevent the terminal from becoming detached.

For attachment on wood-type materials:

8. Prepare per steps 1 and 2.
9. Drill a 2 mm dia. 20 mm deep pilot hole.
10. Screw the two screws, leaving a 2.5 mm minimum space between the wall and the screw head.
11. Carry out steps 6 and 7.

INSTALLING AND USING THE TERMINAL FOR THE FIRST TIME

  This equipment has to be imperatively installed, tested and serviced by qualified personnel. After installation or service, the cover must imperatively be closed and fastened to base with the tie or the screw provided by the manufacturer, in order to ensure end user safety against electric shocks.

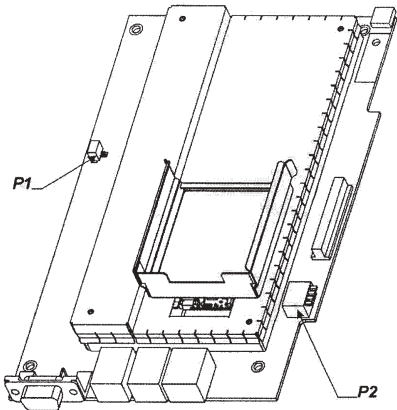
No operator serviceable parts. Refer servicing to qualified personnel. To prevent electric shocks, do not remove cover.

Connecting line / battery / power supply

The various accessories supplied have to be installed carefully before powering the equipment.

Configuration of the terminal

1. Disconnect the power supply.
2. Open the cover of the terminal.
3. Check if the battery is connected (the plug must be inserted in connector P1).
4. If the battery is connected go to step 6.
5. Connect the wire connecting the battery to connector P1, on the printed circuit board of the terminal.
6. Configure DIP switch P2 as indicated in figure below.
7. Close the cover of the terminal.
8. Fasten to the base with the tie or screw provided.



Configuration of P2	Point of P2	Position of the button												
<table><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td> A </td><td> A </td><td> A </td><td> A </td></tr><tr><td> B </td><td> B </td><td> B </td><td> B </td></tr></table>	1	2	3	4	A	A	A	A	B	B	B	B	1	A: Internal antenna (Position by default) B: External antenna
	1	2	3	4										
	A	A	A	A										
	B	B	B	B										
2	A: Power supply disabled B: Power supply enable (Position for operation)													
3	Reserved													
4	Reserved													

INSTALLING AND USING THE TERMINAL FOR THE FIRST TIME

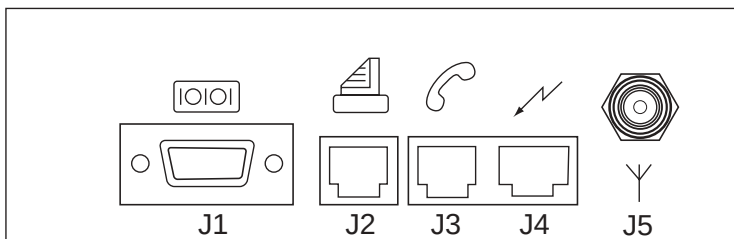
Before connecting, read carefully safety instructions p3

Line

1. Connect your phone set to the other end of your phone cord.
2. Plug the phone cord into the RJ11connector J3 .

Power supply

1. Plug the power supply cable to the connector J4 .
2. Plug the other end of the power supply cable into a 230 V electrical socket outlet.



Commissioning

After having powered the terminal, you will see the lamps successively blinking as below (it generally takes less than 1 minute, depending on network):

1. Both lamps on the front panel of the terminal flash alternatively to indicate that the terminal is initializing.
2. At the end of initialization, both upper and lower lamps flash rapidly during 1 second.
3. If necessary, enter you PIN code as indicated in paragraph Your first call p13.
4. The lower lamp is on, meaning the terminal is ready to use.

Your terminal is now installed !

Check the signal strength.

You can now make your first calls !

INSTALLING AND USING THE TERMINAL FOR THE FIRST TIME

Check the field strength

The upper lamp on the terminal will flash rapidly if the field strength is incorrect or if there is no connection to the phone network.

If necessary, connect an external antenna to the device. Move the external antenna to a position where the coverage is at its maximum.

The external antenna should preferably be inside building to avoid overvoltages due to lightning. If not, it is the responsibility of installer to provide adequate overvoltage protections on external antenna. The installation must be done by qualified personal.

Your first call

Note: In case of a problem at any step of the operations, you can re-initialize the device and disconnecting the battery, wait for 1 minute and connect it again.

This operation should only be done by the qualified personnel.

Making your first call

1. Lift the handset; if you hear a 2 bip/second tone in the handset, enter your PIN code and validate using #. This action is only done when you use your terminal for the first time. You should hear a continuous dialling tone inviting you to dial and the lower lamp on your terminal should be blinking.
2. You can then proceed as if you were using a conventional fixed phone.
3. When you replace the handset, the lower lamp stops blinking.

Receiving calls

1. When you receive a call, your phone rings (activation by the terminal).
2. When you lift the handset, the lower lamp blinks slowly.
3. You can speak to the caller.

SERVICES AVAILABLE ON THE TERMINAL

Conference calls *

To manage conference calls, use the **R** button on your handset as indicated below:

3-party conference call

This service allows you to speak to several persons at the same time.

To set up a Conference call :

1. Dial the first party number. You are then in conversation with him (Mr X).
2. Press **R** then **2** on the phone to put Mr X on hold.
3. Dial the second party number (Mr Y). He comes on the line.
4. Press **R** followed by **3** to be connected with both Mr X and Mr Y.

Note: If you replace your handset, all calls are released.

You can also set up a Conference Call if you are already in conversation and you receive a call waiting tone :

1. Press **R** then **2** on the phone to put the first conversation on hold and to activate the waiting call. You can now speak to the second party.
2. Press **R** then **3** on the phone to be in 3-party conference call.

SERVICES AVAILABLE ON THE TERMINAL

Double call (Call hold / Call wait) *

Using the “double call” service, you can converse with two callers alternatively. If you are engaged on a “double call” and a third caller wishes to contact you, he will then be directed to your voice messaging service*, where he can leave a message for you.

You are engaged on a call with Mr X and a second caller Mr Y rings you; this is indicated to you by a call waiting tone.

You then have three options:

Button pressed	Meaning
R followed by 2	Current call put on hold and activation of the waiting call
R followed by 0	Rejection of the call on hold or of the waiting call
R followed by 1	Terminate the current call and switch to the call on hold or to the waiting call

You can accept the new call

1. Press **R** followed by **2**. Mr X is put on hold. Mr Y will come on the line.
2. To switch from one call to another, press **R** then **2**.
3. To terminate the calls, replace the handset.

You can terminate your first call and accept the call on hold

1. Press **R** followed by **1**.

You can reject the new call in order to stay on the line to your first caller

1. Press **R** then **0**.

Answering device *

The terminal is not equipped with an answering device. However, it manages the messaging service provided by the network Operators*.

With the answering device activated (by means of call forwards to your voice mail), none of the calls are lost and your caller is always able to leave a message for you.

If a message has been left, this is indicated by a shrill beep in the phone and the upper lamp flashing slowly on the front of your terminal.

SERVICES AVAILABLE ON THE TERMINAL

Call forwarding *

Setting up call forwards enables you to switch the incoming calls to another phone number. This number can be the Network voice mail number or any number, provided the subscription allows it (*).

Several types of call forwarding are available:

- **Unconditional call forwarding** (all incoming calls are forwarded to the number recorded).
- **Call forwarding, busy** (engaged) (when you are engaged in a call, and somebody else tries to call you, his call is directly forwarded to the number recorded).
- **Call forwarding, no reply** (when you are not at home or you do not answer, the incoming call is forwarded to the number recorded).
- **Call forwarding, network problem** (if the terminal is not reachable the incoming calls are directly forwarded to the number recorded).

Type	Interrogation	Activation	Deactivation
Unconditional (CFU)	*#21#	**21* <Number> #	##21#
Busy (CFB)	*#67#	**67* <Number> #	##67#
No reply (CFNRy)	*#61#	**61* <Number> #	##61#
Network problem (unavailable) (CFNRE - not reachable)	*#62#	**62* <Number> #	##62#

Result of interrogation:

bass beep: service not activated

shrill beep: service activated

Fax application *

- Plug your analog fax machine (G3) into the RJ11 connector J2. The fax line is dedicated only to send or receive fax.

Receive

- When you receive a fax call, only the fax machine rings (the phones connected to the J3 connector does not ring).
- During the fax call, the phone line is not available.

Transmit

- When you send a fax, the phone line is not available.

SERVICES AVAILABLE ON THE TERMINAL

Data application *

Cable installation

A cable (in option) allows you to connect your terminal directly via the DB 9 pts plug to the serial port on a computer (RS232 - V24).

Modem installation

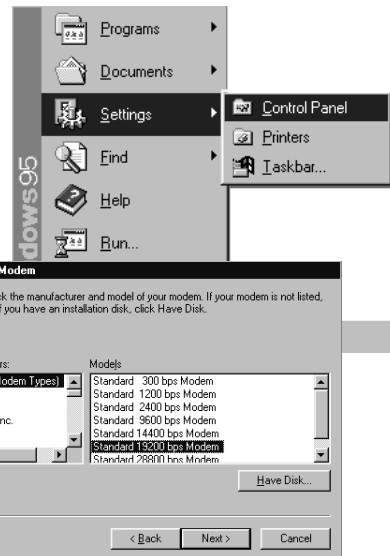
- Driver installation for Windows™ 95/98

- Click on **Start**, at the bottom left of the screen, then without releasing the mouse button, select **Settings > Control Panel**.

- In the window which is displayed, double-click on the **Modems** icon: the **Modems Properties** window is displayed. Click on **Add**: the **Install New Modem** window appears. Check the **Don't detect my modem** box and click on **Next >**.

If a modem is already installed, the **Modems Properties** window is displayed: click on **Add**, the **Install New Modem** window is displayed.

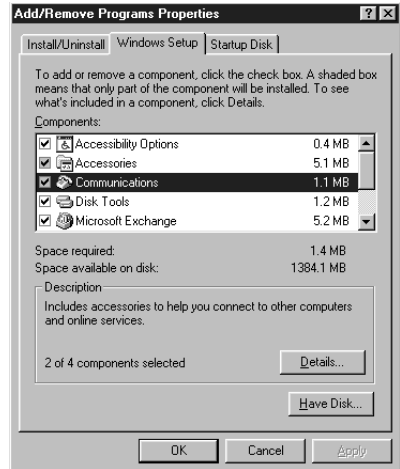
- In the new window, click on **Standard Modem Types** in the left hand column and on **Standard 19200 bps Modem** in the right hand column, then click on **Next >**.
- In the new window, select the port to which the phone is connected: e.g. **Communications Port (COM1)**, then click on **Next >**.
- The computer installs the driver and a success message is displayed. Click on **Finish** then on **Close** in the **Modems Properties** windows. Installation is completed.



SERVICES AVAILABLE ON THE TERMINAL

- HyperTerminal installation for Windows™ 95/98

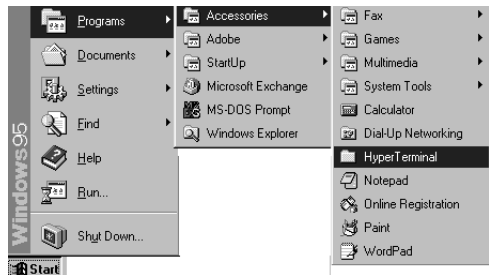
- From the **Control Panel**, double-click on the **Add/Remove Programs** icon. In the new window, click on **Windows Setup**, then double-click on **Communications**.
- In the new window, check the **Dial-Up Networking** and **HyperTerminal** boxes, then click on **OK**; click on **OK**. Installation is completed.



- HyperTerminal configuration

HyperTerminal allows you to transfer files to or from a remote PC equipped with a modem.

- Click on **Start**, then without releasing the mouse button, select **Programs > Accessories > HyperTerminal** or **Programs > Accessories > Communications > HyperTerminal**.



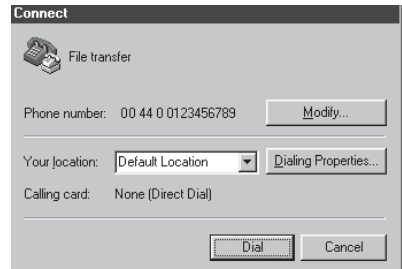
- In the **HyperTerminal** window, double-click on the **HyperTerminal** icon to run the application. The **New Connection, Connection Description** windows appear. Enter a name (File transfer, for example), the choice of associated icon is unimportant. Click on **OK**.

SERVICES AVAILABLE ON THE TERMINAL

- In the new window, the name chosen and the associated icon are displayed. Select **Standard 19200 bps Modem** then enter the phone number. Click on **OK**.



- In the new window, click on **Modify...**



The **File transfer Properties** window appears.

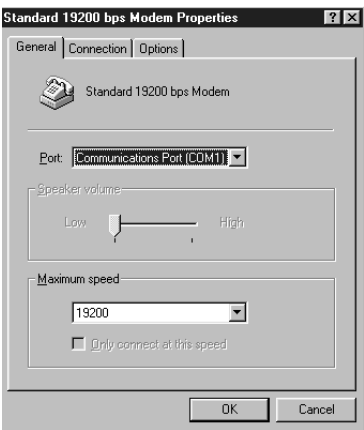
If you do not want to **Use country code and area code**, suppress the tick in the box.

- Click on **Configure...**



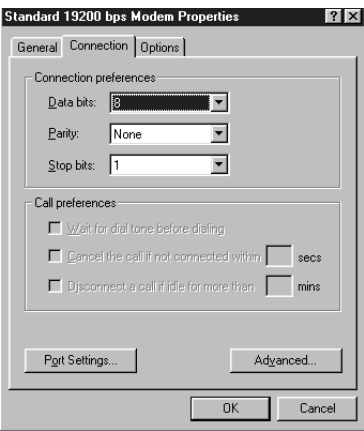
SERVICES AVAILABLE ON THE TERMINAL

In the new window, check if the parameters are correct (COM1, 19200). Click on **Connection**.



- Fill in the window as follows:

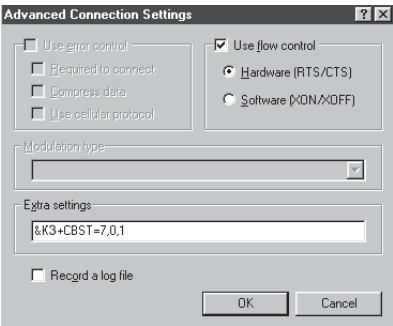
Data bits : 8
Parity : None
Stop bits : 1



- Click on **Advanced...** and fill in the window as follows:

- Tick the box **Use flow control for Hardware**.

Extra settings: &K3+CBST=7,0,1



- To close, click on **OK, OK, OK, Cancel**.

Save under the chosen name (File transfer, for example)

SERVICES AVAILABLE ON THE TERMINAL

Internet application

Parameter configuration in the computer

To log onto the Internet from your PC, you will have to set up a «Dial-Up Networking» connection.

To do this, go to **My Computer/Dial-Up Networking** and select **Make New Connection**.

Give your connection a name and select **Standard 19200 bps Modem (*)**.

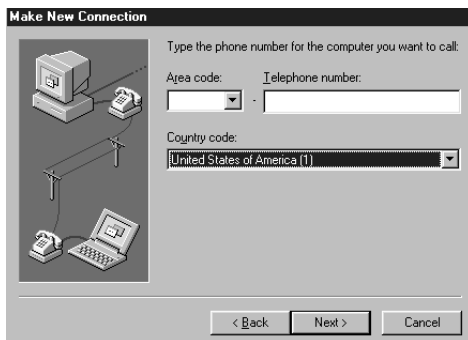
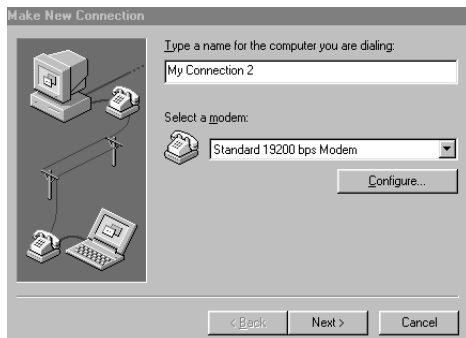
Click on **Configure...** and check that the parameters are as follows:

Maximum speed	: 19200
Data bits	: 8
Parity	: None
Stop bit	: 1
Flow control	: hardware
Additional parameters	: &K3+CBST=7,0,1

Then click on **Next**.

Enter the phone number of your Internet service provider. Click on **Next** and confirm by clicking on **Finish**.

To access the Internet, start up your Dial-Up Networking connection; you must then enter the user name and the password. When the connection is established, start up your browser.



(*) If the **Standard 19200 bps Modem** is not in the list, click on **Cancel** then refer to the chapter entitled MODEM INSTALLATION to install it.

SERVICES AVAILABLE ON THE TERMINAL

Special cases

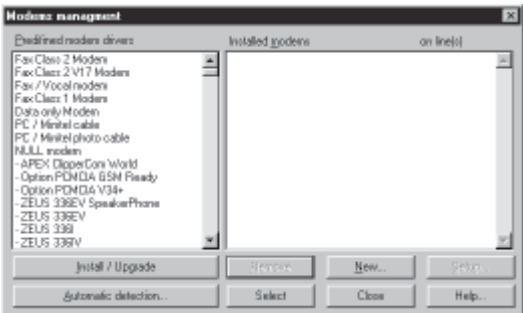
Some service providers automatically create a **Dial-Up Networking** connection for certain types of modems when the Internet browser is being installed. You are advised to choose a **Standard 19200 bps Modem** type connection.

If this is not available, select any connection. When the browser has been installed, go to **My Computer/Dial-Up Networking** and open the connection corresponding to your service provider. Then, change the parameters as shown in the previous section.

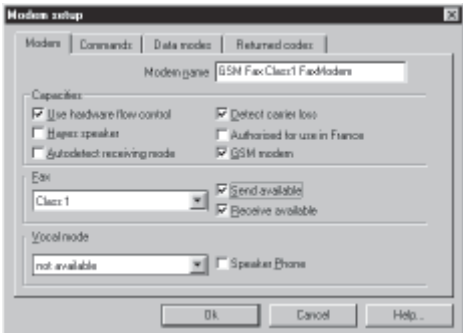
Fax application

- Using RTE FOTOWIN

- Start the application.
- Click on **Setup**: the window **Line Setup** appears. Click on **Modem** to create a new modem.

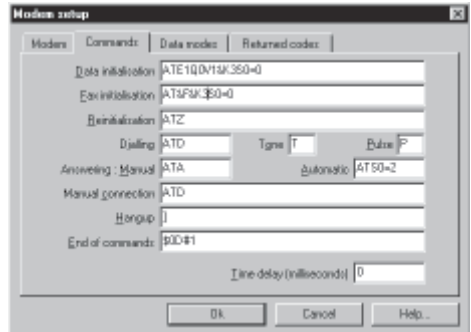


- Click on **New** and fill the **Modem** tab as follows:



SERVICES AVAILABLE ON THE TERMINAL

- Select the **Command** tab and fill it as follows:
- Click on **OK** then on **Close** to return to the window **Line setup**. Select the modem created and the serial port wanted then click on **OK**.
- The application initializes the modem and goes into waiting state.



AT commands

Notation [-] = optional parameter

The following AT commands are handled by the phone:

ATE[0|1]<CR> Command echo:
0= off
1= on.

ATV[0|1]<CR> Answers to AT commands:
0= digital format
1= text format.

ATQ[0|1]<CR> 0= Answers to AT commands are sent to the computer.
1= Answers to AT commands are not sent to the computer.

ATD<number>[:]<CR>
or
ATDP<number>[:]<CR> Dialing.
or
ATDT<number>[:]<CR>

The characters for: 'P' or 'p' (pulse), 'T' or 't' (tone), 'W' or 'w' (wait), ',' (pause) are accepted and indifferent.

<<,> at the end of the command, before <CR>, means: phone call (as opposed to data call).

SERVICES AVAILABLE ON THE TERMINAL

ATA<CR> Answer a call.

ATH[0]<CR> Disconnect existing link.

ATS0=i<CR> Answer calls after "n" rings.

i = 0: no automatic off-hook.

ATBi<CR> Data rate selection:

ATB7 : Analogue modem 2400 (V22BIS)

ATB11 : Analogue modem 4800 (V32)

ATB13 : Analogue modem 9600 (V32)

ATB25 : UDI 2400 - ISDN call

ATB27 : UDI 4800 - ISDN call

ATB29 : UDI 9600 - ISDN call.

ATN4<CR>

or RLP.

ATN6<CR>

ATN0<CR> Non RLP.

A/ Repetition of the previous line.

During a data call:

+++ Return to command mode (Allows to hang up using ATH as soon as the modem has sent OK).

Note: The commands may be combined:

For example

ATE0V0<CR>

ATV0E0<CR>

ATE0<CR> then ATV0<CR>

are equivalent.

SERVICES AVAILABLE ON THE TERMINAL

Depending on model, the following commands are available:

AT&F	To recover the default setting.
AT&kn	Flow control n = 0: no flow control n = 3: hardware flow control (RTS/CTS) n = 4: software flow control (XON/XOFF)
AT&W	Writes the user configuration in saved memory. ATZ command initializes the phone with this configuration.
AT&V	Gives the current configuration, the user configuration and the default settings.

For example

AT&V

ACTIVE PROFILE:

B29E0 Q0 V1 \N0\VO+CMFG1

S00:001 S07:000

STORED PROFILE:

B13E1 Q1 V1 \N4\V1+CMFG0

S00:000 S07:000

DEFAULT SETTINGS:

B11E1 Q0 V1 \V4\VO+CMFG0

S00:000 S07:000

OK

ATI0 to 9	ATI commands give information about the model, type, software version, etc.
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SERVICES AVAILABLE ON THE TERMINAL

Your questions answered

This section describes the most common problems encountered whilst installing data transmission systems.

The terminal does not respond to the AT commands:

- Check that your HyperTerminal session parameters are correct.
- Check that your cable is connected.
- Check that you are connected to the correct COM port on your PC. To ensure that this is the case, use an HyperTerminal session described previously.

The modem must respond to the AT commands. Example : type ATZ then <Enter>. The modem responds OK.

The terminal responds to the AT commands. It dials, then cuts off immediately:

- Check that your terminal supports the DTR signal. If not, type the following commands: at&d0 and at&w.
- If your terminal supports the DTR signal, check the condition of your cable.
- Check that a DATA type option is available with your subscription.

Special characters appears on your PC screen during an incoming call:

- Change the speed of the serial link on your computer so that it corresponds to the speed of your terminal.

ADVICE IN THE EVENT OF A PROBLEM

Before contacting the Customer Service Department, you can try and identify the problem with the aid of the following checklist:

Total lack of response from the terminal

- Check that the phone is connected to the terminal.
- Check that the terminal is connected to the mains power supply, check the socket outlet and the connecting cable.
- Check the field strength (see page 12).

Interruptions during a call

- Check the field strength (see page 12).

Tone errors

Tone and sound	Explanation	Action
----- continuous beeps	No SIM card or auto SIM code pin loading	
Humming in the handset	Interference between your phone and the terminal	Move them at least 2 metres apart
Loud tone and busy tone after the number has been dialled and upper lamp rapidly flashing	No network available	Change the position of the terminal or check subscription
No sound	If after hang off during 15 seconds, there may be a temporary fault on the phone network	Wait and try again
Your caller cannot hear you	The field strength is too weak	Change installing position
You cannot hear anything when you lift the handset	The terminal may be disconnected from the mains power supply	Disconnect the terminal completely then reconnect it and check the lamps

ADVICE IN THE EVENT OF A PROBLEM

Generated tones

Type	Values
Dial tone	425 Hz continuous for 15 seconds
Congestion / busy tone	425 Hz intermittent T_{on} : 300 ms / T_{off} : 300 ms
Confirmation beep	950 Hz, T_{on} : 100 ms
Abort beep	300 Hz, T_{on} : 100 ms / T_{off} : 500 ms / T_{on} : 100 ms

Note: The tones may leave different characteristics according to versions.

- 1 beep of confirmation:** **active service or OK**
- 1 beep of abort:** **inactive service**
- 2 beeps of abort:** **errors**

When a signal indicating that the phone network is unavailable is received, the engaged (busy) signal is transmitted down the line in place of the dialling tone.

If you lift the receiver when the PIN code has not been validated, a series of beeps is superimposed over the dialling tone.

In every case, access to the emergency service is still possible.