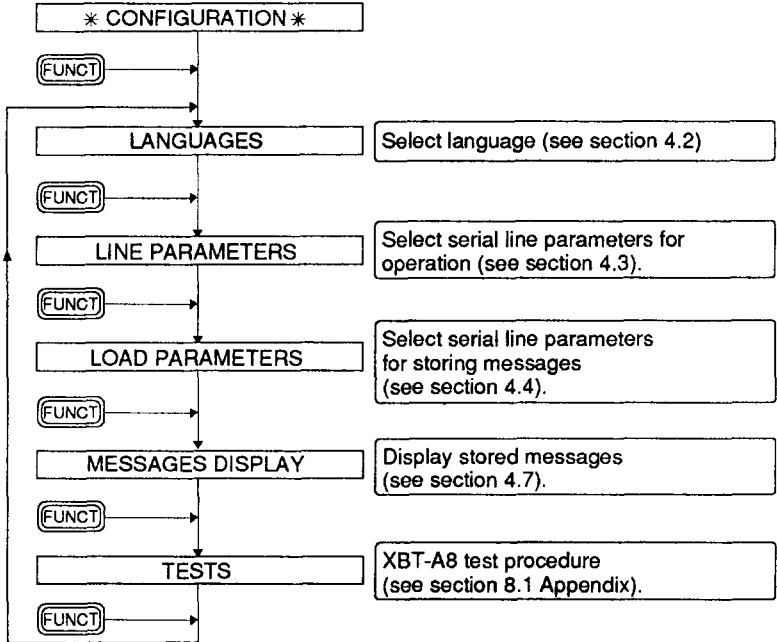


# 4 Configuration

## 4.1 Configuration menu

This mode is used when setting up the XBT-A8 terminal. It allows the operator to select, using the SERVICE KEYS, the parameters required for operating the terminal.

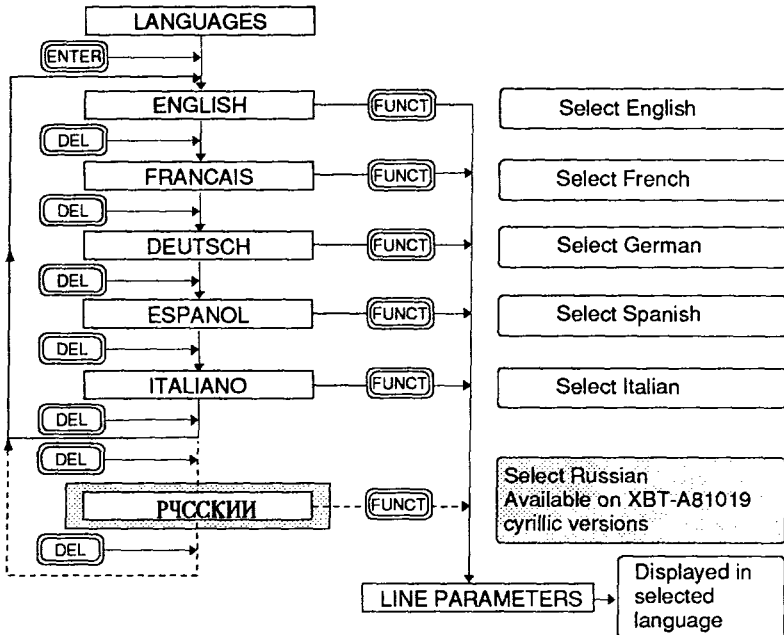
### • General menu for configuration mode



# 4 Configuration

## 4.2 Configuring the languages

WHEN FIRST POWERED-UP THE XBT-A8 TERMINAL IS SET TO ENGLISH



TO RETURN TO RUNNING MODE AT ANY TIME, USE

(ENTER) + (FUNCT)

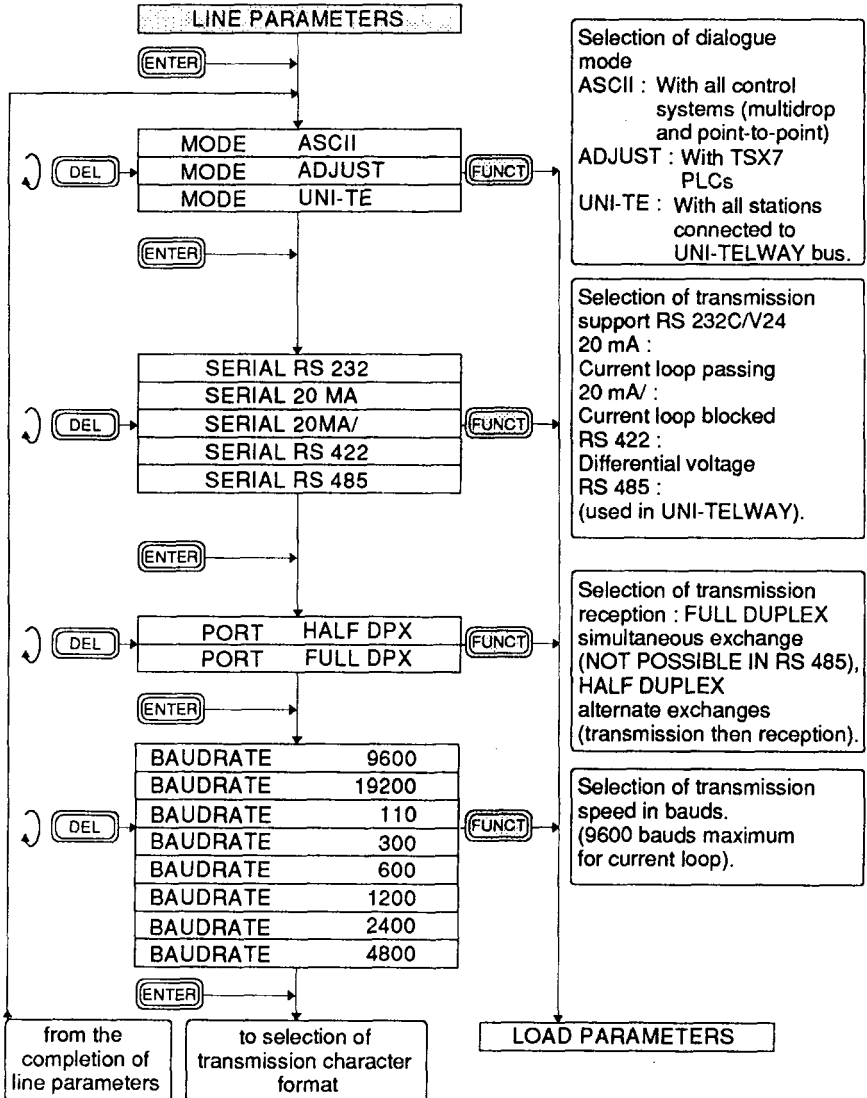
THE PARAMETERS ARE SAVED  
BY USING (FUNCT) OR (ENTER) + (FUNCT)

## 4 Configuration

### 4.3 Configuring the serial line for operation

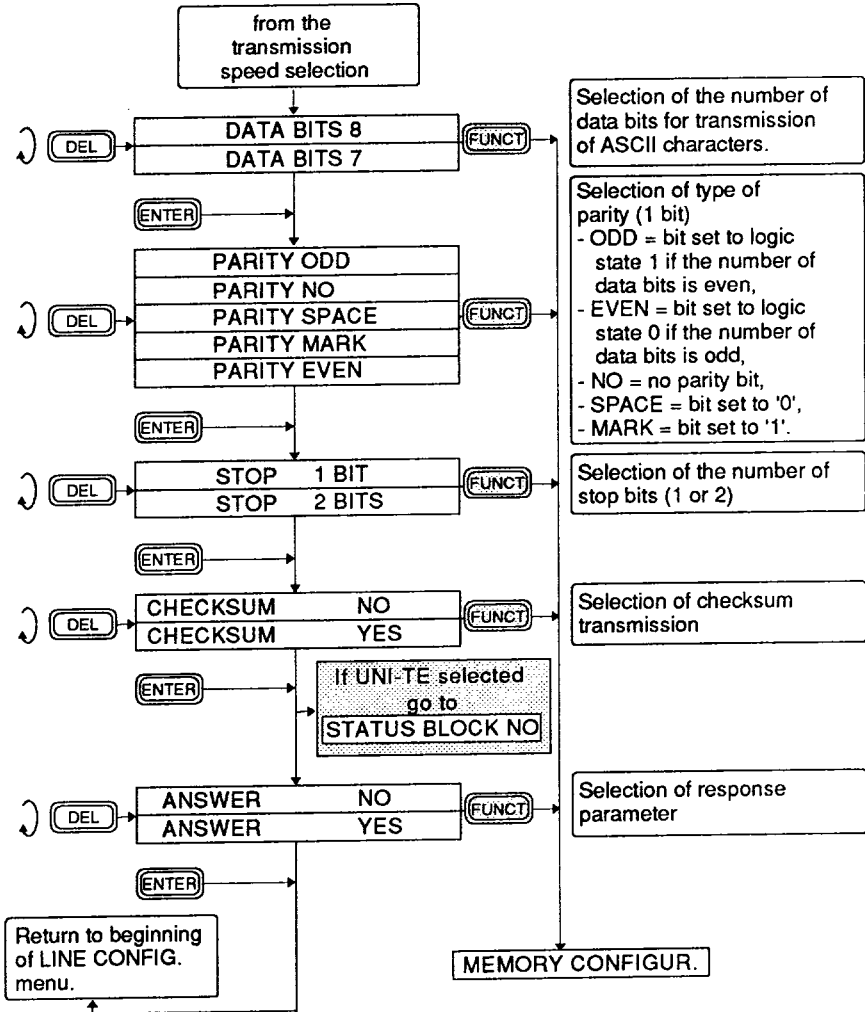
This procedure enables the transmission line parameters to be adapted for interfacing with the control system.

DEFAULT SETTINGS : UNI-TE, RS 485, HDX,  
9600 BAUDS, 8 BITS, ODD PARITY,  
1 STOP BIT, NO STATUS BLOCK



# 4 Configuration

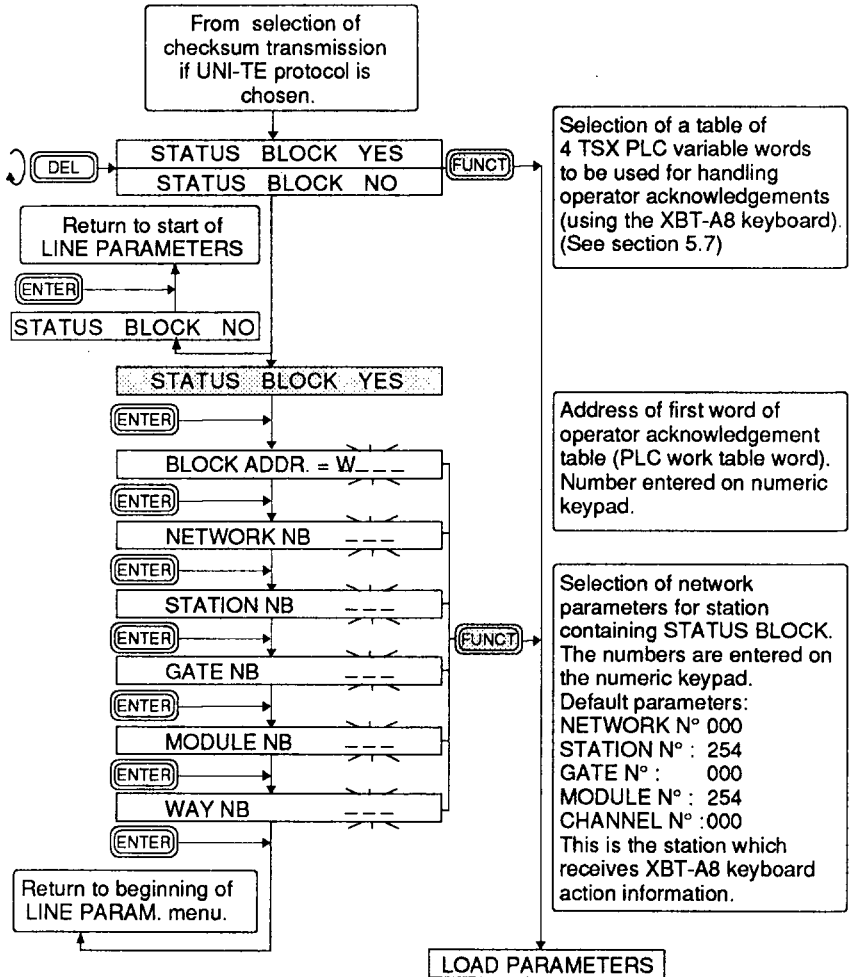
## Configuring the serial line for operation



THE FORMAT : 7 BITS, NO PARITY, 1 STOP BIT, IS NOT ALLOWED

## 4 Configuration

### Configuring the serial line for operation



THE PARAMETERS ARE SAVED BY USING  
**FUNCT** OR **ENTER** + **FUNCT**  
(RETURN TO OPERATION)

# 4 Configuration

## 4.4 Memory configuration

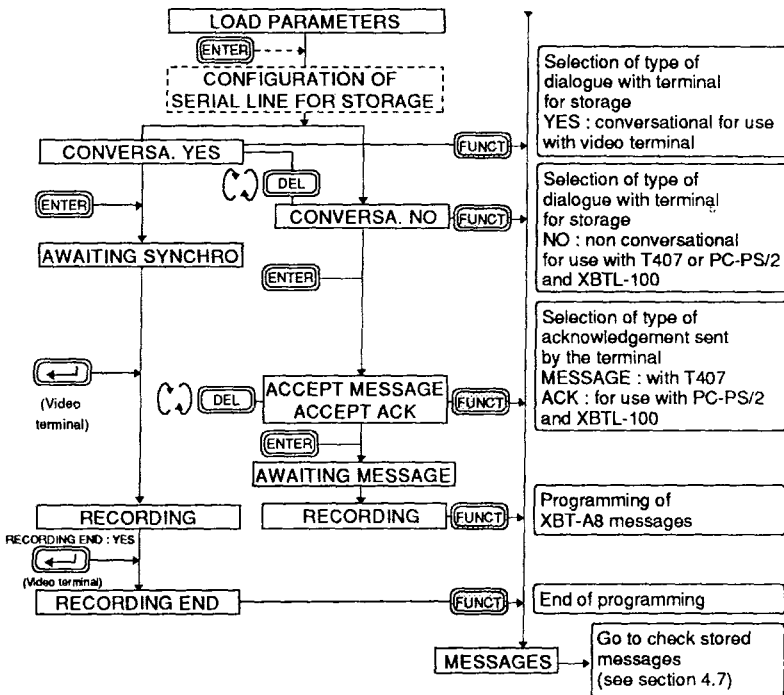
To store messages in the EEPROM memory of the XBT-A8 you need to connect the serial port to a programming device, which may be :

- a TSX T407 programming terminal (non-conversational storing)
- a video terminal (conversational storing)
- a PC-PS/2 computer, using XBTEL to create and archive programs.

During MEMORY CONFIGURATION the XBT-A8 allows its serial line parameters to be adapted to those of the storing device being used (these parameters are stored independently of those stored during LINE CONFIGURATION. They are protected during a power break).

The procedure for configuring the serial line to store messages is described in the XBT-A users guide (section 4. Memory configuration).

Extract from the MEMORY CONFIGURATION menu  
CONVERSATIONAL or NON-CONVERSATIONAL mode may be selected.

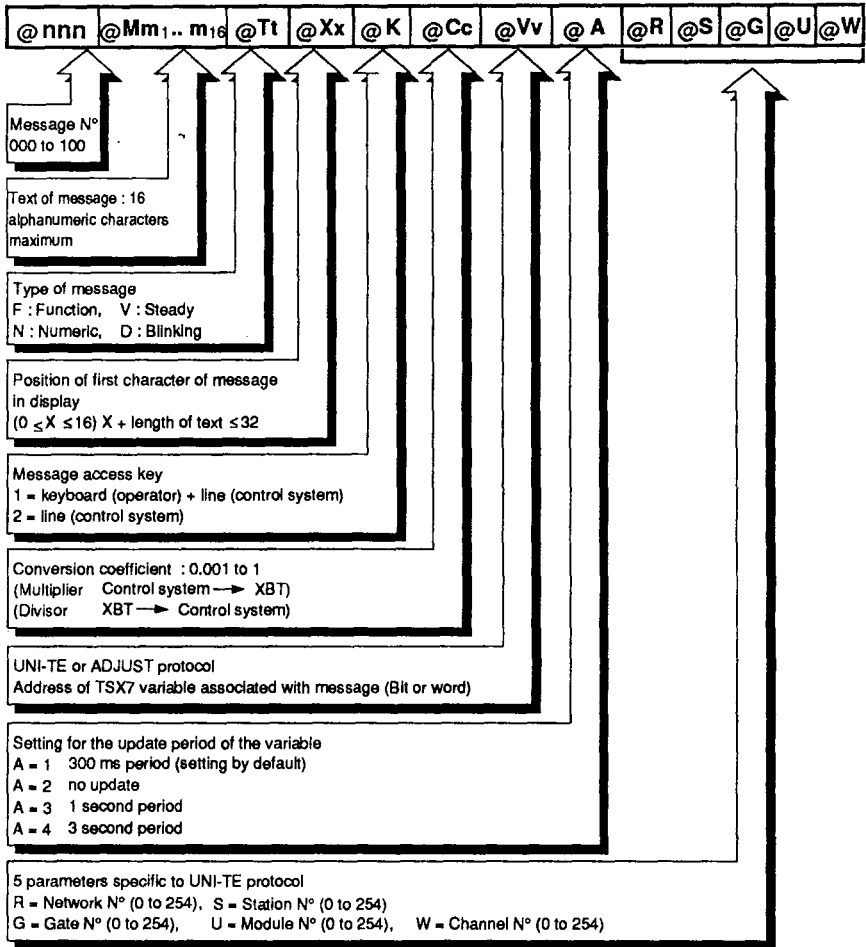


## 4 Configuration

### 4.5 Syntax for storing messages

When writing messages to the XBT-A8 memory in conversational mode it is very important to be consistent in selecting parameters.

The most comprehensive message would be stored as follows :



Example : @001@M - - - - @TV



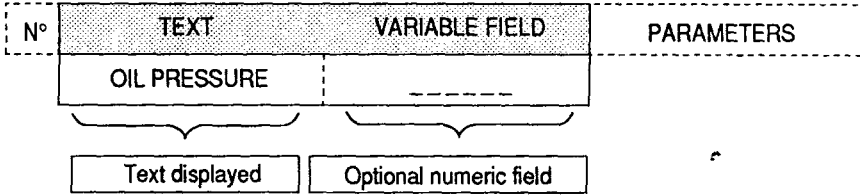
#### DEFAULT SETTINGS :

TYPE V, X = 00, K = 1, C = 1, no associated variables, A = 2, R = 000,  
S = 254, G = 000, U = 254, W = 000

## 4 Configuration

### Syntax for storing messages

- **General rules for message composition :**



- The length of text and numeric field must not exceed 16 characters.
- The optional numeric field must be represented by - (dashes) ( ASCII character 5 F).
- Only ASCII characters 20 to 5F are accepted (lower case characters are refused).
- Decimal points (2E in ASCII) must be used rather than commas (2C in ASCII).

- **Special rules for UNI-TE protocol**

(for use with TSX 7 series PLCs)

- **Messages associated with numeric variables :**

The numeric field has a maximum length of :

- 6 characters (including the sign) where the conversion coefficient  $C = 1$ ,
- 5 characters (including the sign) where the conversion coefficient  $C \neq 1$ , or when the TSX 7 PLC variable is a counter, a timer or a monostable,
- 1 digit when the variable associated with the message is a single bit.

**Notes :**

- Positive values : the + sign is not displayed (it is replaced by a space)
- Negative values : the - sign is displayed.

**ALL MESSAGES WHICH INCLUDE A NUMERIC FIELD MUST BE ASSOCIATED WITH A VARIABLE, OTHERWISE THE DASHES IN THE NUMERIC FIELD ARE TREATED AS TEXT AND THE MESSAGE IS TREATED AS A TYPE V MESSAGE WITH NO ASSOCIATED VARIABLE**



## 4 Configuration

### Syntax for storing messages.

- Variables which can be accessed

TSX7 PLC VARIABLES		TYPE OF MESSAGE			
DESIGNATION	SYNTAX	F	V	N	D
INTERNAL BIT	Bxxxx	X	X	X	X
INPUT BIT	Ixxx,xx		X		X
OUTPUT BIT	Oxxx,xx		X		X
WORD	Wxxxxx	X	X	X	X
CONSTANT WORD	CWxxxxx		X		X
COMMON WORD	COMxx,x		X		X
TIMER	Txxx,V Txxx,P		V/P	P	X
COUNTER	Cxxx,V Cxxx,P		V/P	P	X
MONOSTABLE	Mxxx,V Mxxx,P		V/P	P	X
DRUM CONTROLLER	Dxxx,V		X		X

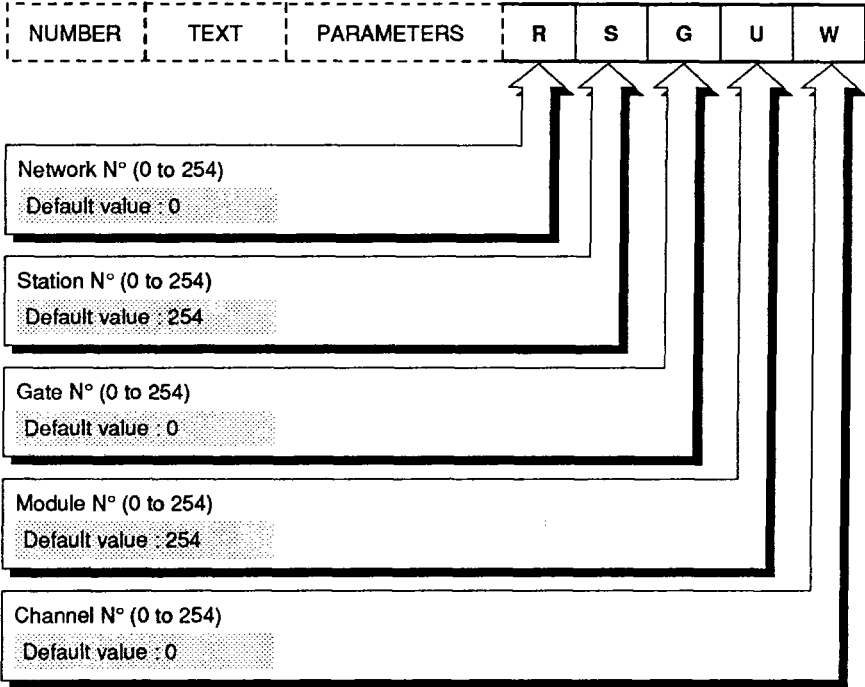
X = allowed, V = Current value, P = Preset value.

**Note :** The designer must adapt syntax limits for the TSX7 variables depending on the PLCs connected to the UNI-TELWAY bus. (Refer to the programming and user manuals for TSX7 PLCs).

## 4 Configuration

### Syntax for storing messages

When an XBT-A8 is connected to the UNI-TELWAY bus, the syntax for storing messages must include five parameters defining a UNI-TELWAY address. This is the address for the SERVER device indicated by the TSX7 variable associated with the message.



# 4 Configuration

## Syntax for storing messages

- Compatibility

COMPATIBILITY TABLE																						
TYPE	TEXT																COL	Access	COEF	VARIABLE	UPD.	COMMENTS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	X	K	C	V	A	
FUNCTION F																	0 to 32	1	1	BIT		Writes a bit to 1 when operator presses key. Message is displayed. Set to 0 on release.
																		1	1	BIT		Bracket function (writing to a bit without display).
																	0 to 32	1	1	WORD		Operator responds with function key associated with V type message without variable (writing key code to the word).
STEADY DISPLAY V																	0 to 32	1 or 2	1			Text displayed.
																	0 to 32	1 or 2	1	ALL OBJECTS (except bits)	1 or 2 or 3 or 4	Text and numeric value of variable displayed.
																	0 to 32	1 or 2	0.001 to 1	ALL OBJECTS (except bits)	1 or 2 or 3 or 4	Text and numeric value of variable displayed.
																	0 to 32	1 or 2	1	BIT	1 or 2 or 3 or 4	Text and state of bit (0 or 1) displayed.
NUMERIC N																0 to 32	1 or 2	1	ALL OBJECTS (except bits)	1 or 2 or 3 or 4	Text and value of variable displayed. Value can be modified using keyboard.	
																0 to 32	1 or 2	0.001 to 1	ALL OBJECTS (except bits)	1 or 2 or 3 or 4	Text and value of variable displayed. Value can be modified.	
																0 to 32	1 or 2	1	BIT	1 or 2 or 3 or 4	Text and state of bit (0 or 1) displayed.	
BLINKING DISPLAY D																0 to 32	1 or 2	1	ALL OBJECTS (except bits)	1 or 2 or 3 or 4	Text and numeric value of variable displayed blinking.	
																0 to 32	1 or 2	0.001 to 1	ALL OBJECTS (except bits)	1 or 2 or 3 or 4	Text and numeric value of variable displayed blinking.	
																0 to 32	1 or 2	1	BIT	1 or 2 or 3 or 4	Text and state of bit (0 or 1) displayed blinking.	
																0 to 32	1 or 2	1			Text displayed blinking.	

## 4 Configuration

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### 4.6 Storing messages using a PC-PS/2 computer

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XBTEL can be used with a PC-PS/2 computer to store messages (and parameters). The following services are provided :

- Creation of an application in local mode in the RAM memory of the PC-PS/2 and archiving (to diskette or hard disk),
- Transfer of an application to one or several terminals,
- Saving an existing application,
- Comparison of an application (PC-PS/2 RAM with XBT memory),
- Printing an application dossier.

#### • Creation

In addition to a table for selecting the language, XBTEL displays a table for writing messages and parameters.

The messages are automatically saved every 20 minutes or at the request of the user.

#### • Transfer

In order to transfer an application to the XBT-A8 terminal or from the XBT to the PC-PS/2, the following must be set up :

- 1 - A n RS 232C connection between the PC-PS/2 computer (SERIAL PORT 1, 2 and 3) and the XBT-A8. Please refer to the section on CONNECTIONS.
- 2 - The transmission parameters between the XBT-A8 terminal and the PC-PS/2 computer by configuring the serial line.

**ONLY THE RS 232 STANDARD MAY BE USED.  
ANY OTHER TYPE OF CONNECTION ABSOLVES TELEMECANIQUE  
FROM THE TERMS OF THE GUARANTEE IN THE EVENT OF DAMAGE**

In order to configure the computer port, select TRANSFER RAM PC-PS/2 → XBT and adjust the parameters (speed, format, parity and stop) in line with those in the XBT-A8 terminal.

Start the transfer operation, which is then carried out automatically.

#### • Comparison

A comparison can be made between the application in the XBT-A8 and an application resident in the PC-PS/2.

#### • Printing

Printing is requested from the TRANSFER menu of the XBTEL software:

- 1 - From the PC-PS/2 to the printer : Select RAM PC-PS/2 → PRINTER, choose the parameters and then start the operation.
- 2 - From the XBT-A8 to the printer via the PC-PS/2 : Select XBT → PRINTER, choose the parameters and then start the operation.  
A serial or parallel printer may be used.

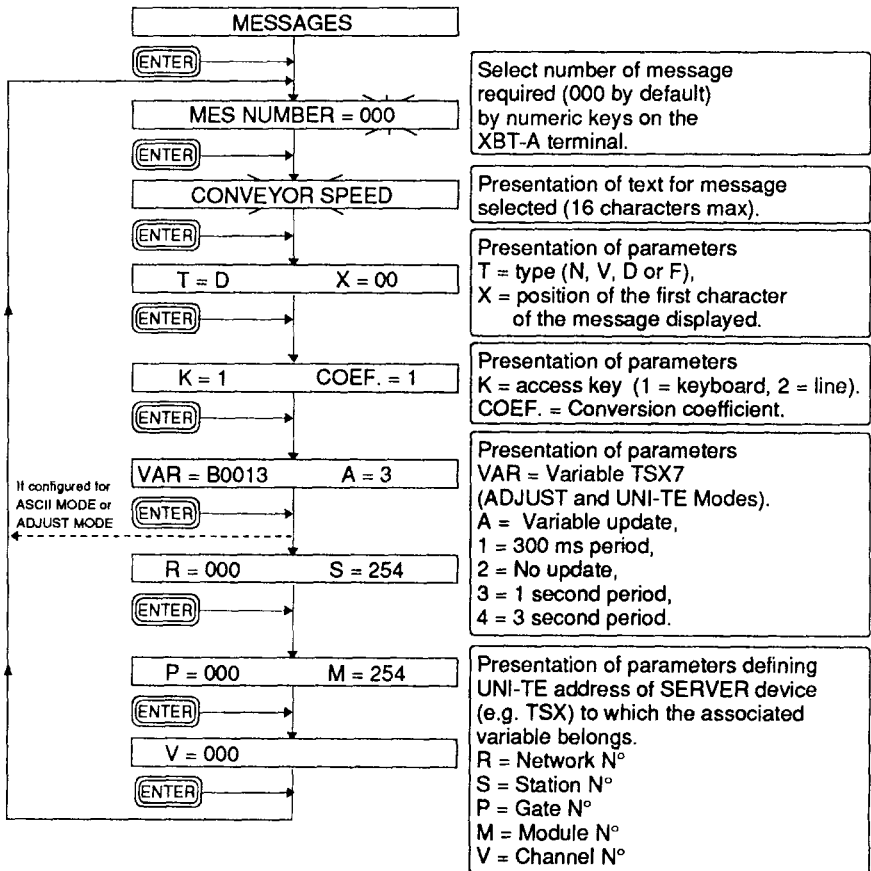
### 4.7 Checking the stored messages

This procedure is used to check to stored messages stored in the EEPROM memory of the XBT-A8 terminal.

The messages are accessed :

- Automatically, incremented by the XBT-A8 after each checking procedure,
- By entering the desired number when **MES NUMBER = XXX** appears.

IF THE SELECTED MESSAGE DOES NOT EXIST,  
**MESSAGE ABSENT** IS DISPLAYED



PRESS (FUNCT) AT ANY TIME  
TO START TERMINAL **TEST** SEQUENCE