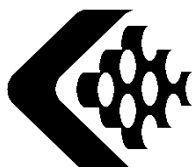


INSTRUCTION EXPLOSIONPROOF TELEPHONE  
ATEX - GAZ

TYPE 229A1  II 2 G



**Groupe LE LAS**  
COMMUNICATION AND SAFETY

## CONTENTS

<b>1. INSTRUCTION FOR TELEPHONE TYPE 229A1 .....</b>	<b>4</b>
<b>2. PRESENTATION .....</b>	<b>6</b>
<b>2.1 CONTENTS OF PACKAGING.....</b>	<b>6</b>
<b>2.2 GENERAL PRESENTATION OF TELEPHONES TYPE 229A1. ....</b>	<b>6</b>
<b>2.3 GENERAL CHARACTERISTICS.....</b>	<b>6</b>
<b>2.4 TYPE OF CABLE.....</b>	<b>6</b>
<b>3. DIMENSIONS AND INSTALLATION OF TELEPHONE .....</b>	<b>7</b>
<b>3.1 OPENING AND CLOSING OF TELEPHONE .....</b>	<b>7</b>
<b>3.2 FIXATION ET AND WEATHERPROOF PROTECTION OF THE CARTER .....</b>	<b>8</b>
<b>3.3 CONNECTING OF TELEPHONE LINE.....</b>	<b>9</b>
<b>3.4 EARTHING OF TELEPHONE.....</b>	<b>9</b>
<b>4. PRESENTATION OF TELEPHONE .....</b>	<b>10</b>
<b>4.1 STANDARD VERSION WITH HANDSET .....</b>	<b>11</b>
<b>4.2 VERSION HANDS FREE .....</b>	<b>12</b>
<b>1 INSTRUCTION FOR TELEPHONE TYPE 229A1.....</b>	<b>4</b>
<b>1.1 CONTENTS OF PACKAGE .....</b>	<b>6</b>
<b>1.2 GENERAL PRESENTATION OF TELEPHONES TYPE 229A1. ....</b>	<b>6</b>
<b>1.3 GENERAL CHARACTERISTICS .....</b>	<b>6</b>
<b>1.4 CABLE TYPE.....</b>	<b>6</b>
<b>2 DIMENSIONS AND INSTALLATION OF TELEPHONE.....</b>	<b>7</b>
<b>2.1 OPENING AND CLOSURE OF TELEPHONE .....</b>	<b>7</b>
<b>2.2 FIXATION AND WEATHERPROOFNESS OF CARTER.....</b>	<b>8</b>
<b>2.3 CONNECTING TO TELEPHONE LINE .....</b>	<b>9</b>
<b>2.4 EARTHING THE TELEPHONE .....</b>	<b>9</b>
<b>3 PRESENTATION OF THE TELEPHONE .....</b>	<b>10</b>
<b>3.1 STANDARD MODEL WITH HANDSET .....</b>	<b>11</b>
<b>3.2 MODEL HANDS FREE.....</b>	<b>12</b>
<b>5. GENERAL CHARACTERISTICS OF TELEPHONE CARD .....</b>	<b>15</b>
<b>5.1. GENERAL PRESENTATION .....</b>	<b>15</b>
<b>5.2. FUNCTIONAL POSSIBILITIES .....</b>	<b>15</b>
<b>6. TECHNICAL CHARACTERISTICS OF TELEPHONE CARD .....</b>	<b>16</b>
<b>7. PRESENTATION OF TELEPHONE CARD (REF: WK205 CMAATX) .....</b>	<b>17</b>
<b>8. CONNECTING OF TELEPHONES .....</b>	<b>18</b>
<b>A. CONNECTION TO TELEPHONE LINE.....</b>	<b>18</b>
<b>B. EARTHING OF THE TELEPHONE.....</b>	<b>18</b>
<b>9. DESCRIPTION OF KEYPAD .....</b>	<b>19</b>
<b>11. TELEPHONES WITH HANDSET AND WITH KEYPAD 14 BUTTONS.....</b>	<b>20</b>
<b>12. TELEPHONE WITH HANDSET WITHOUT KEYPAD (TYPE BC) .....</b>	<b>21</b>
<b>13. TELEPHONE HANDS FREE WITH OR WITHOUT HANDSET WITH KEYPAD 15 KEYS WITH LES SIGLAN OF BUSY LINE .....</b>	<b>22</b>
<b>15. UTILISATION AND PROGRAMMING OF TELEPHONE.....</b>	<b>29</b>
<b>16. IN CASE OF PROBLEM .....</b>	<b>30</b>
<b>17. SPECIAL PROGRAMMING.....</b>	<b>31</b>

**TELEPHONES FOR EXPLOSIVE ATMOSPHERES  
- ATEX -**

**THIS PRODUCT CONFORMS TO WEATHERPROOF PROTECTION  
CLASSIFICATION IP65**

**CAUTION!**

**EACH AND EVERY COMPONENT PART IS INTEGRAL TO THE METHOD  
OF PROTECTION AND CANNOT BE MODIFIED IN ANY WAY WHATSOEVER,  
INCLUDING THE CABLE ENTRIES.**

**THE GUARANTEE ONLY APPLIES WHERE THE PRODUCT IS INSTALLED AND OPERATED  
STRICTLY IN ACCORDANCE WITH INSTRUCTIONS AS DEFINED IN THIS MANUAL**

**NO GUARANTEE CAN BE INVOKED IN THE EVENT OF A DETERIORATION RESULTING FROM  
EXTERNAL FACTORS OR DUE TO LACK OF ADHERENCE TO USER INSTRUCTIONS**

**IN THE DESIRE FOR CONSTANT IMPROVEMENT, THE INFORMATION CONTAINED IN THIS  
DOCUMENT AND THE CHARACTERISTICS OF THE EQUIPMENT MAY BE SUBJECT TO  
MODIFICATIONS WITHOUT PRIOR NOTICE**

**EUROPEAN STANDARDS**

**UNITS BEARING THE CODE "CE" CONFORM TO EMC DIRECTIVE (89/336/CEE) AND THE  
DIRECTIVE RELATING TO LOW VOLTAGES(73/23/EEC) FORMULATED BY THE EUROPEAN  
COMMUNITY**

**UNITS BEARING THE CODE "E x" CONFORM TO EUROPEAN STANDARDS  
EN 50 014 - 1977, EN 50 019 - 1977, EN 50 020-1977, EN 50 028 - 1**

**CERTIFICATE OF CONFORMITY INERIS 09 ATEX 0074 - 2009**

# 1 INSTRUCTION FOR TELEPHONE TYPE 229A1


## IMPORTANT

**THE FIRST SETTING INTO UTILISATION OF THE TELEPHONE SHOULD BE MADE BY THE COMPETENT SPECIALIST OR COMPANY SPECIALIZED IN INSTALLATION OF ELECTRICAL EQUIPMENT IN DANGEROUS EXPLOSIVE AREAS**

**NO CHANGE OR MODIFICATION IN TELEPHONE IS POSSIBLE WITHOUT AGREEMENT OF THE MANUFACTURER**

### MARQUAGE SUIVANT LA DIRECTIVE ATEX 94/9/CE

#### MARKING HAS NEXT INDICATIONS:

- Address : **LE LAS**  
34/36, Rue Roger Salengro  
F94134 Fontenay sous Bois
- Marking : **CE0080**
- Reference of model: **229A1G (gaz)**
- Year of manufacturing: **200-**
- Special marking:  **Ex II2G (gaz)**
- Additional marking: **Ex e ib mb IICT5** pour la catégorie II2G
- Certificate of conformity: **INERIS 09ATEX0074**
- Ambient temperature of use : **Tamb. = -40°C à +60°C**
- Electrical characteristics : **Umax.= 60Vcc – Imax. = 80Ma. – Pmax. 1.2W**
- Reference of equipment
- Number of serie

### **ATTENTION: DON'T OPEN WHEN ON TENSION**

In respect of international norms and standards, the certification of this equipment is obtained according to directives II de la directive 94/9/CE from 23 March 1994 and :

For gas:

- EN 60079-0 de Octobre 2006
- EN 60079-7 de Mars 2007
- EN 60079-11 de Mars 2007
- EN 60079-18 de Juillet 2004 / AC :2006

## **STARTING / USE**

The instructions which follow must be read together with:

- 1- Standard NF C 15 100
- 2- Standard EN 60 079-14 (installations électriques en atmosphères explosives gazeuses)
- 3- Standard EN 60 079-17 (inspection et entretien dans les emplacements dangereux)
- 4- decrees, orders, laws, directives, circulars of applications, the standards, the rules of the art and quite other document concerning its place of installation.

The disregards of these would not engage our responsibility.

The installation of the equipment must be realized by the qualified, competent and authorized personnel.

Make sure of the compatibility between the indications representing on the descriptive plate, the present explosive atmosphere, the zone of use and the ambient temperatures and of surface.

## **INSTRUCTIONS OF MAINTENANCE**

### **INSTRUCTIONS OF MAINTENANCE**

The check of the following points must be made at least once a year.

- The outside equipment and the faces must not be damaged.  
It is not allowed to put on the telephone in a degraded state.
- Verify the tightening of borders and other connections; recable if needed.
- Before closure, verify the seal of the case, the cleanliness, its state as well as its installation
- Verify that lid is good in place on the case and maintained by 4 screws
- To verify the tightening of glands on cable entries or cables to assure the waterproofness.
- Use a soft and wet cloth for the outside cleaning of the device

### **NEVER USE SOLVENTS OR SHARP OBJECTS**



## **PARTICULAR CONDITIONS**

The typical telephone 229A1 must be connected on a telephone line having the following characteristics:

- Nominal Tension of supply:  $U_{max.} = 60V_{cc}$
- Current supplied:  $I_{max.} = 80mA$
- Power dispersed:  $P_{max.} = 1.2W$

## 2. PRESENTATION

### 1.1 CONTENTS OF PACKAGE

The equipment which you have just acquired includes::

- A telephone
- An instruction
- A plastic bag including: corks of waterproofness for the fixation

### 1.2 GENERAL PRESENTATION OF TELEPHONES TYPE 229A1.

Useful industrial telephone in potentially explosive atmosphere for the group IIC in zone II2G ( gas).  
Containing two cards protected by intrinsic safety, and a set of electronic components drowned in a resin is protected by envelope. This sealed card contains, on its superior face, two borders "e" for the connecting of the telephone line.

Equipped with a handset according to version and protected also by intrinsic safety..

Of type BC/BCA BC/BCA, useful in networks or installations fed with central battery, within the limits of tension authorized by our devices (see technical characteristics described in the note of programming of the phone card).

La fermeture du couvercle sur joint d'étanchéité est assurée par 4 vis imperdable six pans creux en acier inoxydable.

Case and lid made of polycarbonate resistant to shock, of orange color RAL2003, this whole crankcase is protected by increased safety. The closure of the lid is assured by 4 screws.

### 1.3 GENERAL CHARACTERISTICS

According to model, these phone are equipped with:

- Loudspeaker or piézo (according to model)
- Standard keypad or keypad with double function ( memory) with display
  - Button of call with LED signal of line occupation
  - Microphone électret weatherproof
  - Wall fixation murale on 2 or 4 points
  - Position of handset can be rotated
  - 2 entries of cable Eex for cable Ø10 to Ø13mm.

#### Options :

- Card flash-lamp on entering call

### 1.4 CABLE TYPE

The telephone is equipped with cable gland ( cable entry) certified Eex for cable of Ø 10 up to maxi 13 mm. The connecting blocks admit monowire or multiwire of a maxi section of 1.5mm<sup>2</sup>. To connect the earth on a special screw equipped with a pod of section of 4 - 6mm<sup>2</sup> situated on the lower internal panel of the case.

## 2 DIMENSIONS AND INSTALLATION OF TELEPHONE

### 2.1 OPENING AND CLOSURE OF TELEPHONE

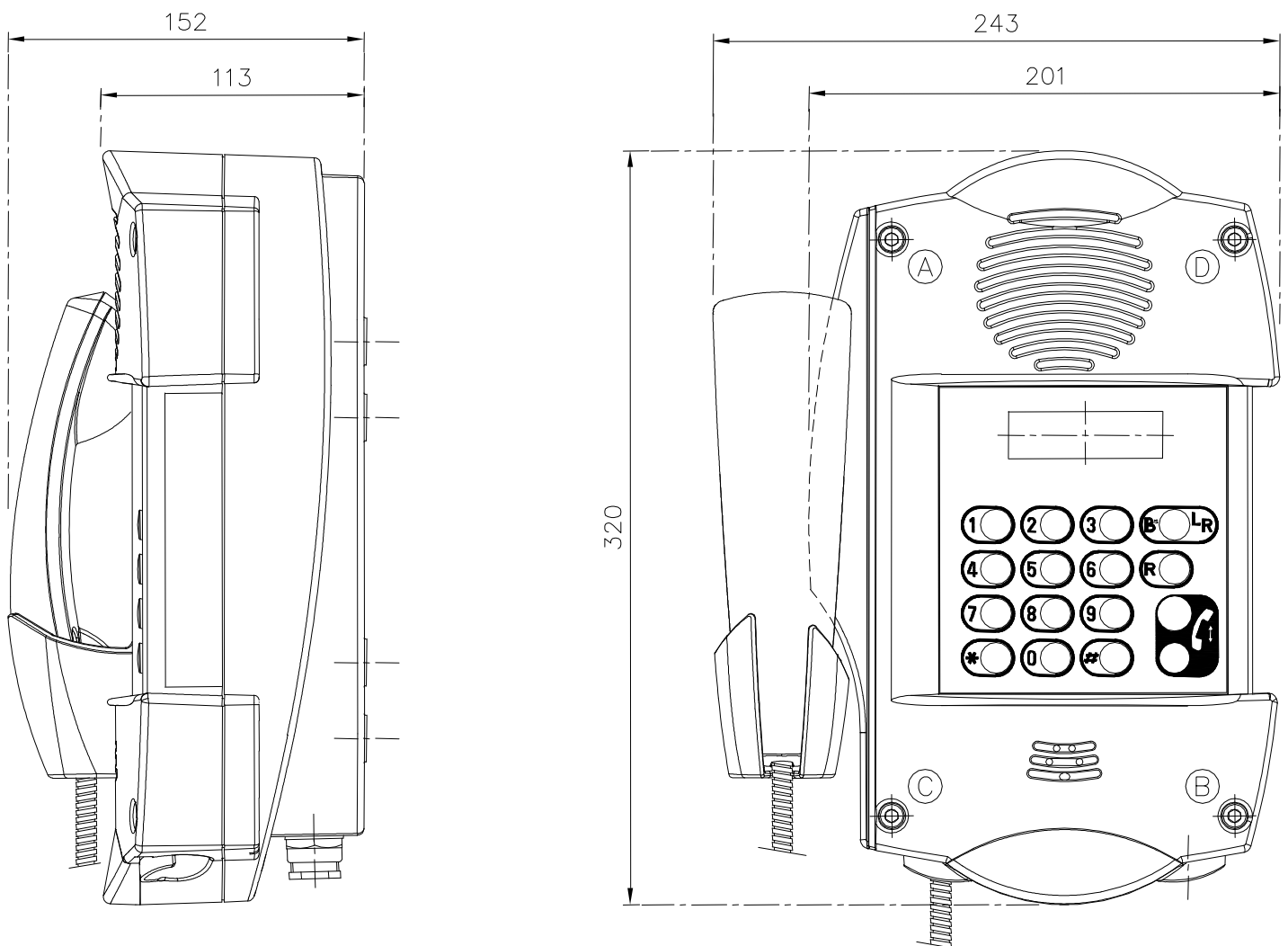
**ATTENTION:** we deeply recommend the use of non electric device to tighten the screws and to do it by hand, especially during the closure of the lid in order to assure a homogeneous compression of the lid of the case by respecting the order A B C D. (see drawing)

To have access to the card of the telephone, undo the screws respecting the order A B C D of fixation on the face panel without removing the screw(the special form of the screw doesn't permit them top fall down).

**ATTENTION:** during the dismantling of the face lid, an earth wire is connected from the lid with the case. For an easy work, you can disconnect the internal earth pod (screw) situated in the internal part of the telephone at the level of the entries of cables. Reconnect the earth pod after cabling of the telephone line.

For the closure of the telephone , supervise the good installation of the telephone as well as the state of the weatherproofness of the case, put correctly 2 faces of the telephone and tighten 4 screws by respecting the order of screwing A, B, C, D (to see the picture).

- DIMENSIONS -



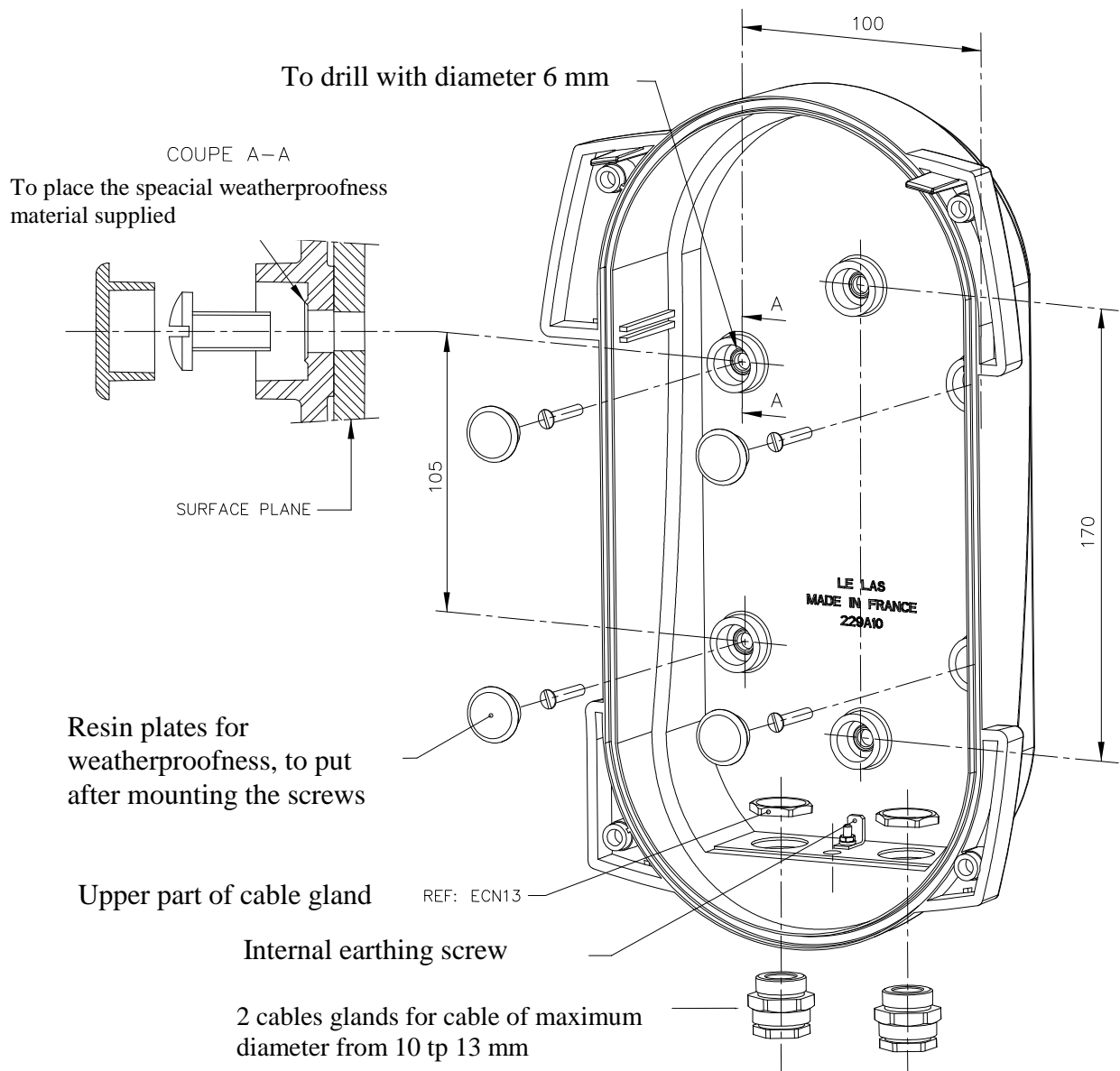
## 2.2 FIXATION AND WEATHERPROOFNESS OF CARTER

The wall-mounting device of the telephone can be made in 2 points (vertical line 170mm) or in 4 points (105x100mm on a plane surface).

- To drill chosen places (2 or 4 points of fixation) with drilling device of  $\varnothing 6$  mm .
- To fix the case to a plane surface with screws of diameter  $\varnothing 6$ .

Tighten the screws to crush a little the special material (resin) of waterproofness situated at the emplacement of closure of telephone.

- To place corks of weatherproofness on the places containing the screws ( in order to close all possible holes)



- **Adapt the diameters of cables to the diameters of the entries of cables (Maxi  $\varnothing 10 - 13$ ) and tighten them correctly.**

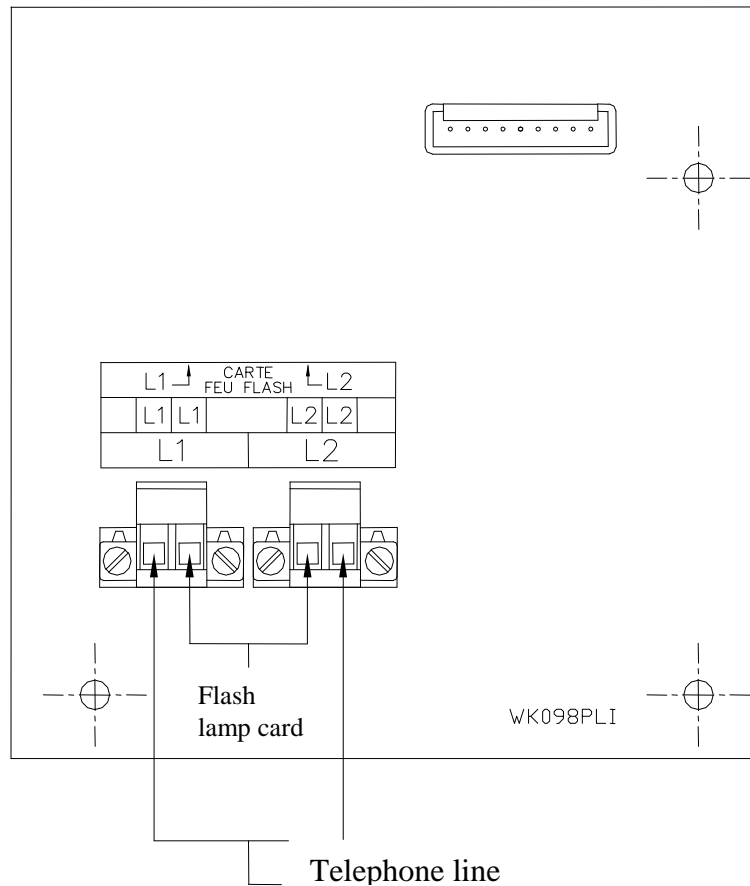
\* screws not supplied, to use rather stainless steel screws .



### 2.3 CONNECTING TO TELEPHONE LINE

The connecting of the telephone line is made on the sealed card with intrinsic protection WK098PLIATX by connector lockable and embedded.

The connecting blocks admit monowire or multiwire of a maximum section of 1.5mm<sup>2</sup>. Connect the line to terminals L1 and L2 which are doubled to connect extensions.



### 2.4 EARTHING THE TELEPHONE

Electrical earthing is carried out externally via the earth screw (situated on the lower part of the case) of diameter section of 4-6 mm<sup>2</sup> referenced by the sign ⊥.

Do not forget to reconnect the yellow / green earth wire cable coming from the face panel on the earth screw situated inside the case at the level of the entries of cable.

### 3 PRESENTATION OF THE TELEPHONE



Selon versions les postes sont équipées de :

- Telephone card DC/MF
  - Card with intrinsic protection
  - Card keypad 14 buttons, standard
  - Card keypad 14 buttons + button for hands free function + display
  - Card keypad 1 / 2 buttons
  - 2 entries of cable Eex for cable Ø10 to 13 mm
  - handset
  - Weatherproof loudspeaker for modela hands free
  - Weatherproof piezo
  - Card flash lamp
- réf: WK205CMAATX  
réf: WK098PLIATX  
réf: WK114CLA  
réf: WK163CLAF  
réf: WK114CLA1  
réf : EEL13C10\*13ATX  
réf : MS436A17G68  
réf : CE124V11  
réf : MT229A1A  
réf : WK025FLDATX

### 3.1 STANDARD MODEL WITH HANDSET



#### **TLC 229 A1**

Telephone with handset BC (central battery)  
Without keypad

- Model with flash lamp :  
TLC 229 A1 F



#### **TLA 229 A1**

Telephone with handset and with keypad with 14 keys

- Model with flash lamp :  
TLA 229 A1 F



#### **TLA 229 A1L**

Telephone with handset and with keypad with 14 keys and display

- Model with flash lamp :  
TLA 229 A1 FL

### 3.2 MODEL HANDS FREE



#### **TLS 229 A1 C9L**

Telephone with handset and with keypad with 14 keys and display  
+1 key for taking line with little LED lamp

- Model with flash lamp :  
TLS 229 A1 C9FL



#### **TLS 229 A1 C9GL**

Telephone with handset and with keypad with 14 keys and display  
+ 1 key for taking line with little LED lamp

- Model with flash lamp :  
TLS 229 A1 C9FGL



#### **TLS 229 A1 B**

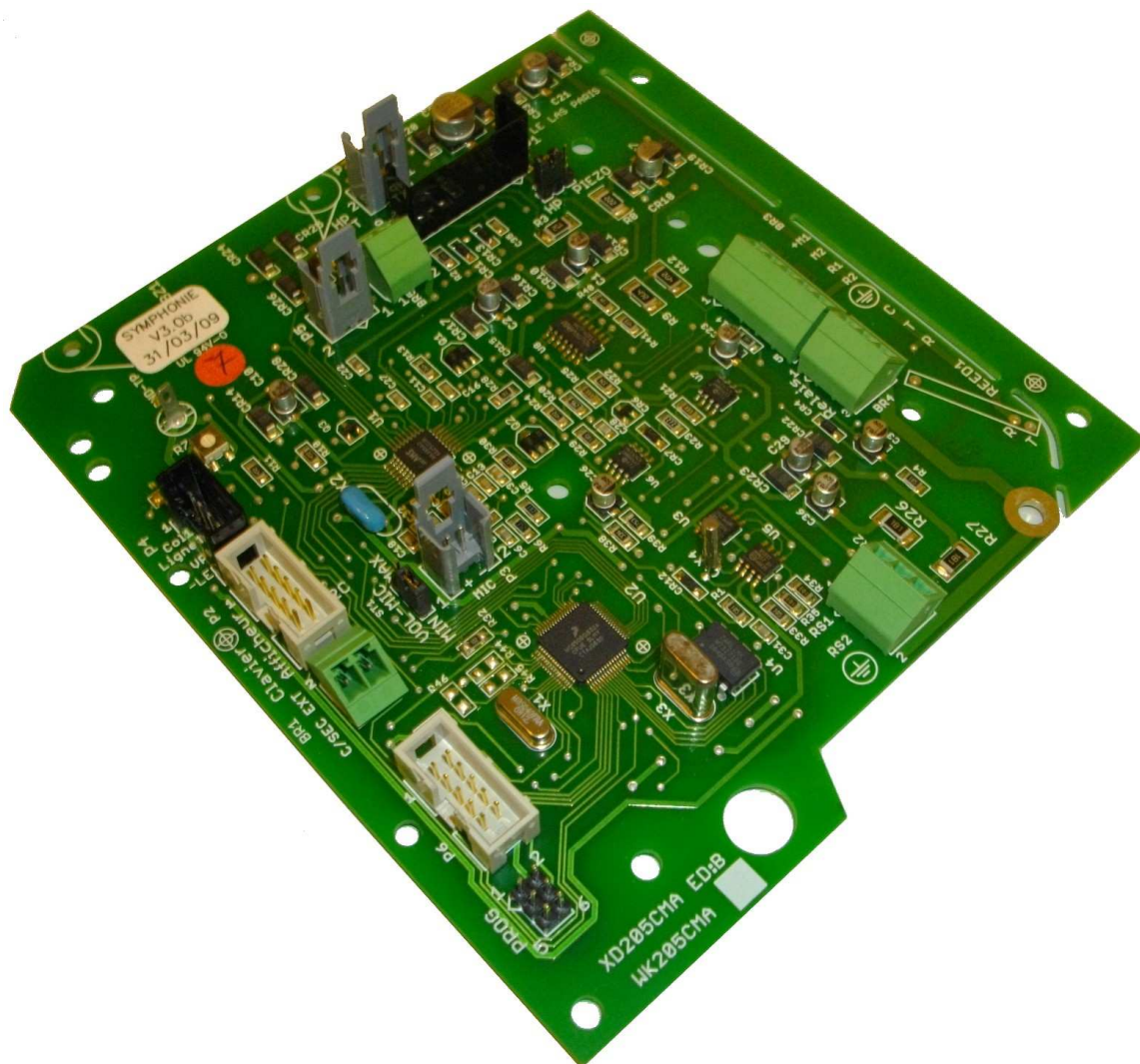
Telephone hands free with 1 button and little LED signal of busy line.

- Model with flash lamp :  
TLS 229 A1 BF
- Model with handset :  
TLS 229 A1 BG
- Model with flash lamp + handset :

**There are models with 2, 4 or 8 keys**

INSTRUCTION OF TELEPHONE CARD WK205CMAATX

ATEX -  II 2 G



**TELEPHONE CART FOR EXPLOSIONPROOF TELEPHONE**  
**EQUIPMENT FOR EXPLOSIVE SITES**

THIS PRODUCT CONFORMS TO WEATHERPROOF PROTECTION  
CLASSIFICATION IP65

**CAUTION!**

EACH AND EVERY COMPONENT PART IS INTEGRAL TO THE METHOD  
OF PROTECTION AND CANNOT BE MODIFIED IN ANY WAY WHATSOEVER,  
INCLUDING THE CABLE ENTRIES.

THE GUARANTEE ONLY APPLIES WHERE THE PRODUCT IS INSTALLED AND OPERATED  
STRICTLY IN ACCORDANCE WITH INSTRUCTIONS AS DEFINED IN THIS MANUAL

NO GUARANTEE CAN BE INVOKED IN THE EVENT OF A DETERIORATION RESULTING FROM  
EXTERNAL FACTORS OR DUE TO LACK OF ADHERENCE TO USER INSTRUCTIONS

IN THE DESIRE FOR CONSTANT IMPROVEMENT, THE INFORMATION CONTAINED IN THIS  
DOCUMENT AND THE CHARACTERISTICS OF THE EQUIPMENT MAY BE SUBJECT TO  
MODIFICATIONS WITHOUT PRIOR NOTICE

**EUROPEAN STANDARDS**

UNITS BEARING THE CODE "CE" CONFORM TO EMC DIRECTIVE (89/336/CEE) AND THE  
DIRECTIVE RELATING TO LOW VOLTAGES(73/23/EEC) FORMULATED BY THE EUROPEAN  
COMMUNITY

UNITS BEARING THE CODE "E x" CONFORM TO EUROPEAN STANDARDS  
EN 60 079-0 - 2006, EN 60 079-7 - 2007, EN 60 011 - 2007, EN 60 079-18 – 2004

**AGREMENT ART N° 98667P DU 29 JUILLET 1998**  
**CERTIFICATE OF CONFORMITY INERIS 98.D 5002 X - 24 FEBRUARY 1998**

## **5. GENERAL CHARACTERISTICS OF TELEPHONE CARD**

### **5.1. GENERAL PRESENTATION**

Telephone protected by increased safety, containing two cards with printed circuits protected by intrinsic safety, and a set of electronic components sealed in a resin and protected by envelope. The card with printed circuit coated contains, on its superior face, two connecting blocks "e" for the connecting of the telephone line.

### **5.2. FUNCTIONAL POSSIBILITIES**

#### **For all types of telephones:**

- Dialing multifrequencies (DTMF) and digital (for telephones type BCA).
- Modification of remote regulations for telephones DTMF or by station of maintenance (option) of :
  - Type of bell
  - Volume of bell
  - Volume of loudspeaker
  - Type dialing

#### **For telephones with hands free function:**

- Possibility of hung up automatic.
- Possibility of immediate unhooking or after a programmable number of bells.
- Possibility of "Antipiaf" (useful microphone after internal numbering).
- Programming of the numbers stored in memory locally or at distance by telephone type DTMF.
- Possibility of chain (sequence) of several numbers in case of occupation or if not answer after programmable time.
- Pick up automatic

#### **ATTENTION**

THESE PRODUCTS, EQUIPPED WITH A MICROPROCESSOR, MAKE, DURING THE CONNECTING IN THE TELEPHONE LINE, AN AUTO-TEST PUNCTUATED BY THE BROADCAST OF A SOUND SIGNAL.

THEY POSSESS NUMEROUS PROGRAMMABLE FUNCTIONS AND ARE CONFIGURED IN SITE FOR BETTER USE.

Phone sets equipped with this card, work without any modification on the typical public networks. For a correct functioning on a private autoswitch, it is necessary to make sure that the following characteristics coincide with those of your autoswitch. Should the opposite occur proceed to the corrections by using the means of programming. In case of incompatibility, software on inquiry can be executed, contact the manufacturer for more information.

## 6. TECHNICAL CHARACTERISTICS OF TELEPHONE CARD

### PARTICULAR CONDITIONS

Telephone card should be connected to the telephone line having following characteristics

- Nominal tension :  $U_{max.} = 60V_{cc}$
- Current :  $I_{max.} = 80mA$
- Power dispersed :  $P_{max.} = 1.2W$

### **FOR ALL TYPES OF TELEPHONES:**

- Tension of call received from the PABX  $> 35 V_{eff} < U_{bell} < 80V_{eff}$  CA 25 or 50Hz  
Duration of bell :  $1.5s \pm 0.5s$   
 $I_{max} = 0,05 A_{eff}$  ;  $P_{max} = 1 W$   
Duration of pause:  $3s \pm 2 s$   
Power of bell for  $U_{max} = 80V_{eff}$ : approx. 85dB
- Current in the telephone (position picked up) 35mA (20mA minimum)  
 $I_{max} = 0,08 A_{DC}$  ;  $P_{max} = 1,2 W$
- Tension on the connecting blocks (position hung down) 48V (24V minimum)  $U_{max} = 60 V_{DC}$
- Dialing types DTMF or digital

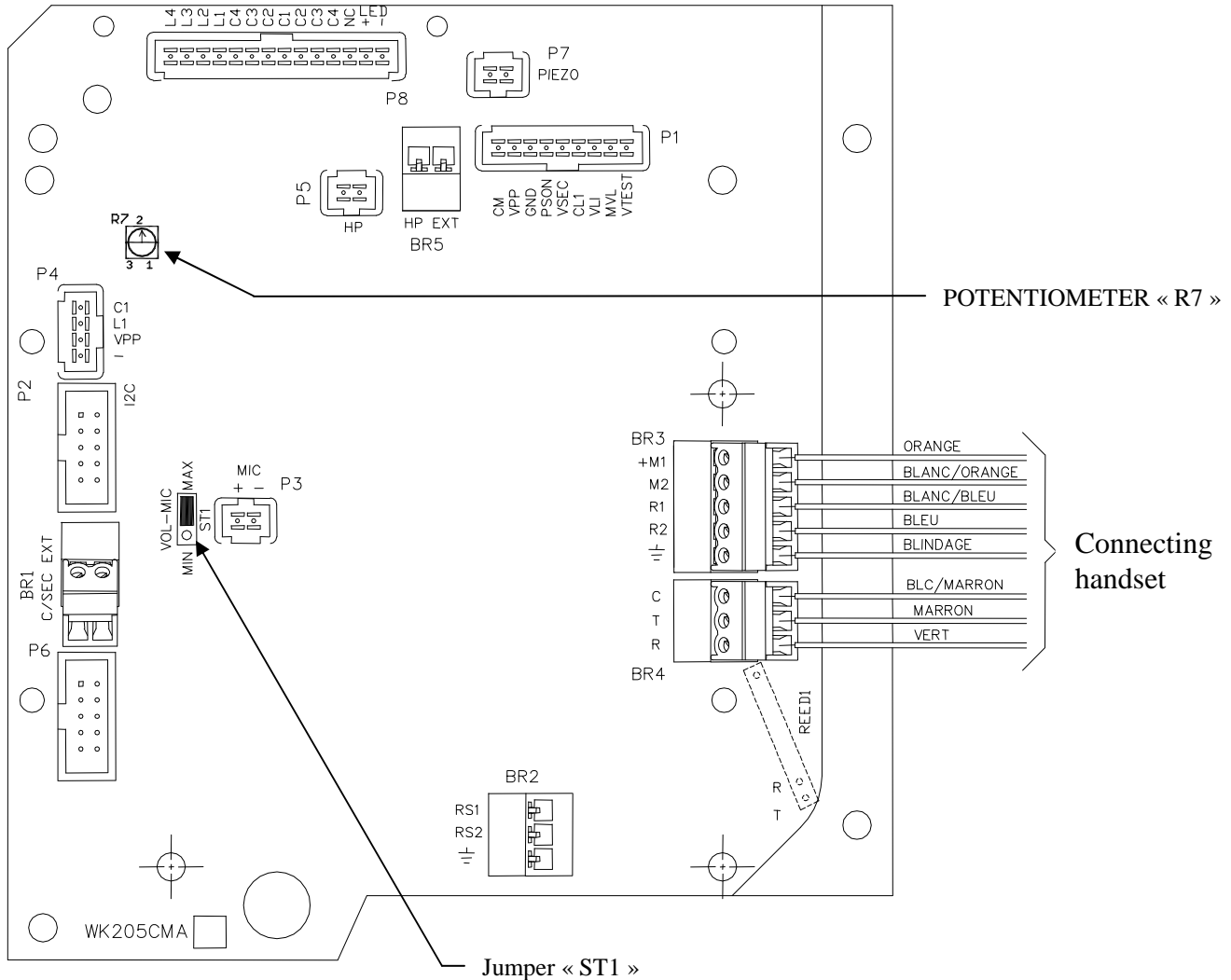
### **FOR TELEPHONES HANDS FREE:**




- Tonality of invitation to dial continued tonality  
Frequency: from 270 to 540Hz time of detection min 2 sec.  
Tonality of occupation  
Frequency: 300 to 500 Hz  
Sequence of bip and pause of more than 10 seconds. time of detection 4-10 sec  
Bip: 100 à 600 ms  
Pause: 100 à 600 ms (= au bip)
- Come back tonality of distant call  
Frequency: 350 à 500Hz  
Sequence of bip and pause till pick up automatically  
Bip: 0.2sec. to 1.6 sec.  
Cycle bip + pause inferior to 6 seconds.
- Rhythmic tone of the end of conversation  
Frequency: 300 to 500 Hz  
Sequence of bip and pause of more than 10 seconds. time of detection 4-10 sec  
Bip: 100 to 600 ms  
Pause: 100 to 600 ms (= au bip)
- Continued tone of the end of conversation  
Frequency: 300 to 500 Hz or 760 to 840 Hz  
Duration of bip superior to 10 seconds. time of detection 6-10 sec



## 7. PRESENTATION OF TELEPHONE CARD (REF: WK205 CMAATX)

### FUNCTIONS AND REGULATIONS BY THE STRAPS

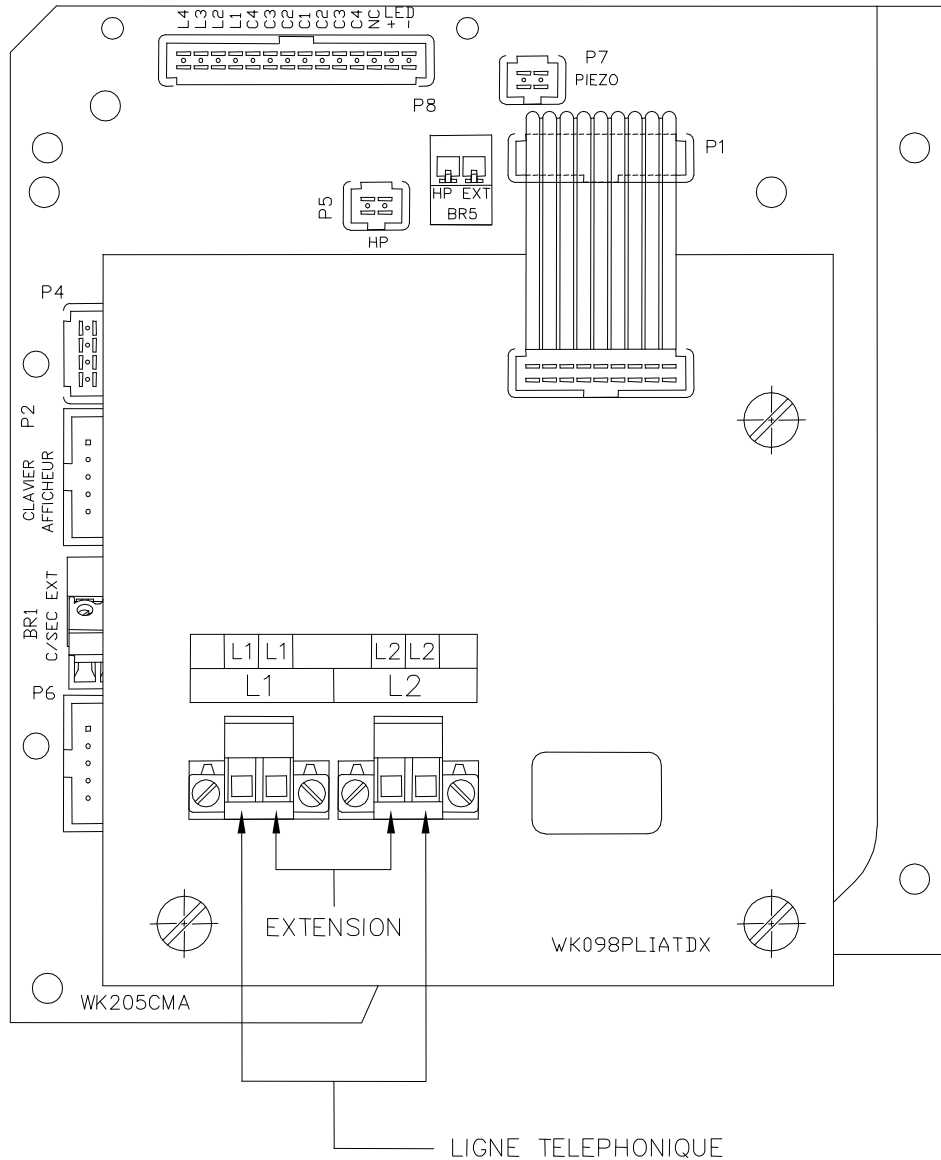


FUNCTIONS	LANDMARKS	JUMPERS
<b>HANDS-FREE MICROPHONE SENSITIVITY</b> <ul style="list-style-type: none"> <li>Sensitivity at 1 metre: place jumper on MAX</li> <li>Sensitivity at 30 cm: place jumper on MIN</li> </ul>	ST1	MIN  MAX
<b>NOISE THRESHOLD SETTING</b> <ul style="list-style-type: none"> <li>MIN setting: for quiet environment</li> <li>MAX setting: for very noisy environment</li> </ul>		MIN  MAX
<b>NOTE:</b> normal setting is carried out in the factory (according to design)	R7	MAX  MIN

## 8. CONNECTING OF TELEPHONES

### A. CONNECTION TO TELEPHONE LINE

Connection of the telephone to the line is carried out on the intrinsic safety card WK098PLIATX via the connector which can be embedded and lockable.



Connect the line to terminals L1 and L2 which are doubled to connect extensions. The connecting blocks admit monowire or multiwire of a maximum section of 1.5mm<sup>2</sup>.

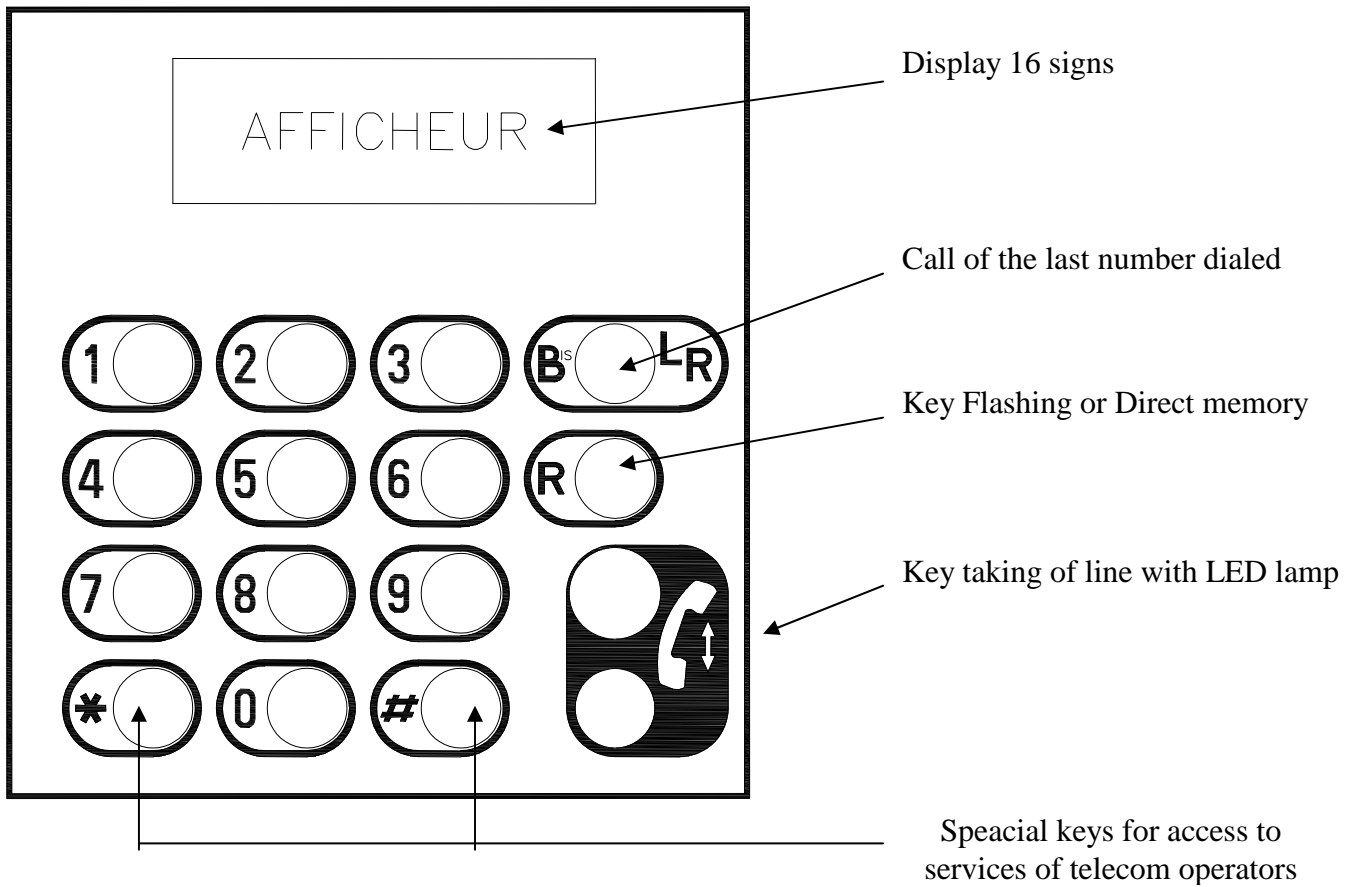
### B. EARTHING OF THE TELEPHONE

The earthing of the telephone is made as followed :

- Electrical earthing is carried out externally via the earth screw (situated on the lower part of the case) referenced by the sign ⊥ with section of 4 à 6mm<sup>2</sup>
- via the earth screw (situated inside of the case) referenced by the sign ⊥ with section of 1.5mm<sup>2</sup>

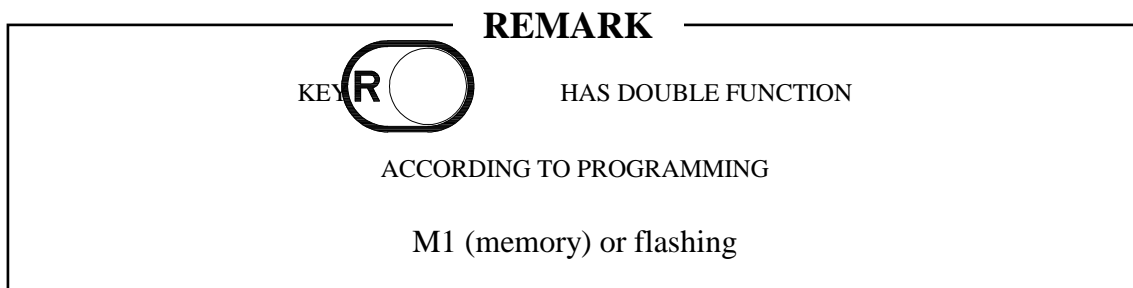
## 9. DESCRIPTION OF KEYPAD

Selon modèles, les postes téléphoniques sont équipés d'un clavier standard étanche à 14 touches et combiné. Pour la version main libre, clavier étanche 15 touches avec témoin lumineux de prise de ligne, et afficheur à cristaux liquides, sur 2 lignes de 16 caractères, rétro-éclairé.



**Attention** It is possible to attribute a number preprogrammed for every key of the keyboard (0 - 9) only in model free hands, to see chapter " Programming of the telephone numbers ".

- Telephone with distant control : 8 memory keys M1 to M8 used by pressing the key only
- Telephone without distant control : 10 memory keys M0 to M9 used by pressing the key only
- 



## 10. UTILISATION OF TELEPHONES

### 11. TELEPHONES WITH HANDSET AND WITH KEYPAD 14 BUTTONS

#### TO CALL

1

**LIFT THE HANDSET**

2

**DIAL THE NUMBER**

When the communication is finished, to release the line:

3

**HANG DOWN THE HANDSET**

#### TO ANSWER A CALL

When the telephone rings

1

**LIFT THE HANDSET**

When the communication is finished, to release the line:

**HANG DOWN THE HANDSET**

#### LAST NUMBER REDIAL

1

**LIFT THE HANDSET**

2

**PRESS KEY BIS**



When the communication is finished, to release the line:

3

**HANG DOWN THE HANDSET**

3

## **FLASH RECALL**

PRESS "R"



A programmed flash recall of 270ms takes place. Length of time of flash can be adjusted by programming. The **R** button has a double functions according to the programming : flashing or direct memory M1

### **NOTE**

LENGTH OF CONVERSATION IS NOT LIMITED IN THE FACTORY. IT CAN BE CHANGED BY PROGRAMMING.

## **12. TELEPHONE WITH HANDSET WITHOUT KEYPAD (TYPE BC)**

### **TO CALL**

1

LIFT THE HANDSET

When the communication is finished, to release the line:

3

HANG DOWN THE HANDSET

### **HOW TO ANSWER**

When the telephone rings

1

LIFT THE HANDSET

When the communication is finished, to release the line:

3

2

HANG DOWN THE HANDSET

**13. TELEPHONE HANDS FREE WITH OR WITHOUT HANDSET WITH KEYPAD 15**  
**KEYS WITH LES SIGLAN OF BUSY LINE**

Operation of a telephone alternating from handset to hands-free with keypad:

- Lift handset ⇒ take line/handset
- Push PL button ⇒ hands-free
- Push PL button ⇒ handset
- Replace handset ⇒ release line

or:

- Lift handset ⇒ take line/handset
- Push PL button ⇒ hands-free
- Replace handset ⇒ hands-free
- Push PL button ⇒ release line

or:

- Push PL button ⇒ take line/hands-free
- Lift handset ⇒ handset
- Replace handset ⇒ hands-free
- Push PL button ⇒ release line

If the handset is not replaced (vandalism, handset ripped out) the telephone remains operational hands-free

**TO CALL**

**1**  
**PUSH THE CALL BUTTON OR LIFT THE HANDSET**

The red indicator comes on



**2**  
**DIAL THE NUMBER**

When the called party responds, speak in front of the telephone from a distance

Of approximately 20cm or into the handset

When the communication is finished, to release the line:

**3**  
**PUSH THE CALL BUTTON OR REPLACE THE HANDSET OR LET**  
**THE TELEPHONE CLEAR DOWN AUTOMATICALLY**

The red indicator goes off



**NOTE** : It is possible to attribute a number preprogrammed for every key of the keyboard (0 - 9) only in model free hands, to see chapter " Programming of the telephone numbers " .

## HOW TO ANSWER

When the telephone rings

1

**PUSH THE CALL BUTTON OR LIFT THE HANDSET**



The red indicator comes on  
Speak in front of the telephone from a distance Of approximately  
20cm or into the handset

When the communication is finished, to release the line:

2

**PUSH THE CALL BUTTON  
OR REPLACE THE HANDSET  
OR LET THE TELEPHONE**



The red indicator goes off

## LAST NUMBER REDIAL

The red indicator comes on

1

**PRESS “BIS” OR LR**



When the called party responds, speak in front of the telephone from a distance  
Of approximately 20cm or into the handset

**PUSH THE <sup>2</sup>CALL BUTTON  
OR LIFT THE HANDSET**

When the communication is finished, to release the line:

3

**PUSH THE CALL BUTTON  
OR REPLACE THE HANDSET  
OR LET THE TELEPHONE  
CLEAR DOWN AUTOMATICALLY**



## FLASH RECALL

PRESS "R"



A programmed flash recall of 270ms takes place  
Length of time of flash can be adjusted by programming

The **R** button has a double functions according to the programming : flashing or direct memory M1

### NOTE

LENGTH OF CONVERSATION IS NOT LIMITED IN THE FACTORY.  
IT CAN BE CHANGED BY PROGRAMMING.

## 14. TELEPHONES HANDS FREE WITH OR WITHOUT HANDSET WITH KEY OF TAKING LINE

- • Operation of a telephone alternating from handset to hands-free CB:

- Lift handset ⇒ take line/handset
- Push PL button ⇒ hands-free
- Push PL button ⇒ handset
- Replace handset ⇒ release line

or:

- Lift handset ⇒ take line/handset
- Push PL button ⇒ hands-free
- Replace handset ⇒ hands-free
- Push PL button ⇒ release line

or:

- Push PL button ⇒ take line/hands-free
- Lift handset ⇒ handset
- Replace handset ⇒ hands-free
- Push PL button ⇒ release line

If the handset is not replaced (vandalism, handset ripped out) the telephone remains operational hands-free.

**NOTA : Symbol or key of taking line (PL) can vary in different models.**



Or





## TO CALL

**1**  
**PUSH THE CALL BUTTON  
OR LIFT THE HANDSET**



The red indicator comes on

When the called party responds, speak in front of the telephone from an approximate distance of 20 cm or into the handset.

When the communication is finished, to release the line:

**2**  
**PUSH THE CALL BUTTON  
OR REPLACE THE HANDSET  
OR LET THE TELEPHONE  
CLEAR DOWN AUTOMATICALLY**



The red indicator goes off

## TO ANSWER A CALL

When the telephone rings

**1**  
**PUSH THE CALL BUTTON  
OR LIFT THE HANDSET**



The red indicator comes on

Speak in front of the telephone from an approximate distance of 20 cm or into the handset.

When the communication is finished, to release the line:

**2**  
**PUSH THE CALL BUTTON  
OR REPLACE THE HANDSET  
OR LET THE TELEPHONE  
CLEAR DOWN AUTOMATICALLY**



The red indicator goes off

## 15.STANDARD PROGRAMMING

The sequence of buttons to be keyed on the keypad of a remote telephone, DTMF type, connected to the telephone to be programmed.

Take care during programming, the presence of busy tone can clear down the telephone automatically.

**IMPORTANT:** Before any programming, key the access code :

*	1	2	3	4	*
---	---	---	---	---	---

### PROGRAMMING OF UNIQUE CALL NUMBER M5)

(FOR TELEPHONES WITH 1 KEY)

Key the combinaison:

*	5	0	0	5	*	#	1	1	#	<N>	*
---	---	---	---	---	---	---	---	---	---	-----	---

< N > call number of 1 to 15 numbers

Exceptions are telephones with 2 keys where the key **2** has memory **M1**

During memory programming , the combination #11# represents the recognition of a continuous tone with a frequency of 440 Hz  $\pm$  100Hz (standard) before dialling.

This is the standard for UK and many other countries but in some other countries #10# may be applicable instead, whereby a 2-second pause is inserted rather than tone recognition.

### PROGRAMMING OF CALL NUMBERS (M0 A M8)

Key the combinaison for every key:

*	5	0	0	<M>	*	#	1	1	#	<N>	*
---	---	---	---	-----	---	---	---	---	---	-----	---

< M > number in memory from 0 to 8 attributed to keys 0 to 8.

- Telephone with distant control : 8 memory keys M1 to M8 used by pressing the key only
- Telephone without distant control : 10 memory keys M0 to M9 used by pressing the key only


### **REMARQUE**

IN TELEPHONES WITH KEYPAD , MEMORY M1 CAN BE ATTRIBUTED TO THE KEY



### PROGRAMMING THE KEY



For full keypad telephone, to assigne button  to memory M1 key the combinaison:

*	2	4	0	0	*
---	---	---	---	---	---

## PROGRAMMING THE TYPE OF DIALLING OF THE TELEPHONE

Key one of the following combinations:

1/ For DTMF dialling and automatic clear down  
Key the combinaison

*	1	0	0	2	*
---	---	---	---	---	---

2/ For pulse dialling and automatic cleardown  
Key the combinaison

*	1	0	0	3	*
---	---	---	---	---	---

3/ To suppress automatic cleardown (usual case for DTMF handset telephone)  
Key the combinaison

*	1	0	0	6	*
---	---	---	---	---	---

4/ To suppress automatic cleardown (usual case for pulse handset telephone)  
Key the combinaison

*	1	0	0	7	*
---	---	---	---	---	---

## RECEIVE VOLUME ADJUSTMENT (HANDS-FREE TELEPHONES)

Key the following combination:

*	1	4	0	<V>	*
---	---	---	---	-----	---

< V > Volume from 0 to 9 (factory setting = 5)

## RINGING VOLUME ADJUSTMENT

Key the following combination:

*	1	6	0	<V>	*
---	---	---	---	-----	---

< V > Volume from 1 to 7(factory setting = 7)

**PROGRAMMING OF CHAIN ( SEQUENCE) OF NUMBERS**

For programming of several numbers in memory , key the combinaison:

*	5	0	0	<M>	*	#	1	1	#	<N>	*
---	---	---	---	-----	---	---	---	---	---	-----	---

M = 1, 2, 3....., 8 max

N = number of call from 1 to 15 numbers

The sequence of numbers always begins with basic memory attributed to each key and stops at the first blank memory.

For programming of blank memory (or delete the number) key the combinaison:

*	5	0	0	<M>	*	*
---	---	---	---	-----	---	---

YOU should obligatory programm the time of pause between memories

T1 between M1-M2 et

T2 between M2-M3, M3-M4 etc.. if it is a case .

These tempos represent the waiting times in case of no answer before passing in the following number.

For T1 key the combinaison:

*	2	0	T	T	*
---	---	---	---	---	---

TT represents the value of tempo of waiting in seconds.

In the case of a single programmed number TT = 00 In the case of a chain (sequence of numbers) of 2 or several numbers, two possibilities appear:

A) To hear what takes place on-line by programming T1 in an even value (30 seconds for example)

B) To hide what takes place on-line (not answer, occupation etc.) until the pick up of the correspondent, by a simulation of bell and blinking of the led.

On detection of the word of the called correspondent, a long beep announces to both correspondents the establishment of the communication, the led passes in fixed light.

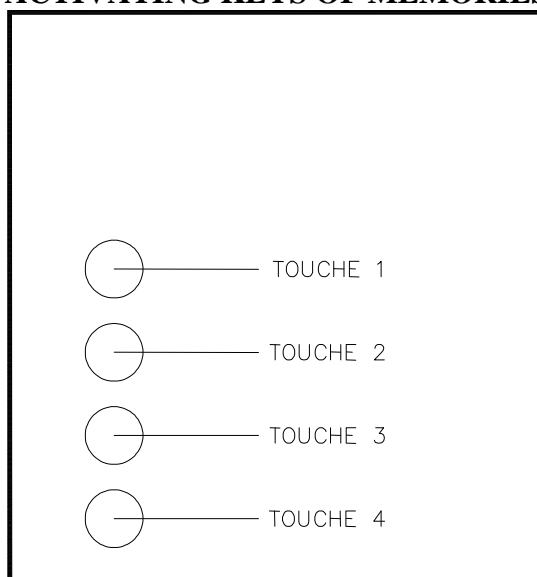
For it , it is necessary to program T1 in an odd value (31 seconds for example).

For T2 key the combinaison :

*	2	1	T	T	*
---	---	---	---	---	---

## 15. UTILISATION AND PROGRAMMING OF TELEPHONE

### ACTIVATING KEYS OF MEMORIES



### PROGRAMMING OF MEMORIES:

- from a distant telephone, call the telephone
- when the telephone rings, to pick up the receiver
- from the distant telephone, to enter into programming by the user code (\*1234\* ), a beep is emitted by the telephone
- to program the memory of the key **1**, key **\*5001\*xxxxxxxx\*** (or xxxxxxxxxxx representing the number of memory to launch), a beep is emitted by the telephone
- to program the memory of the key **2**, key **\*5004\*xxxxxxxx\*** (or xxxxxxxxxxx representing the number of memory to launch), a beep is emitted by the telephone
- to program the memory of the key **3**, key **\*5007\*xxxxxxxx\*** (or xxxxxxxxxxx representing the number of memory to launch), a beep is emitted by the telephone
- to program the memory of the key **4**, key **\*5010\*xxxxxxxx\*** (or xxxxxxxxxxx representing the number of memory to launch), a beep is emitted by the telephone
- to hang up the receiver of the distant telephone
- to hang up the receiver

**NB : The key 4 (memory M10) doesn't accept the chain of numbers**

### TEST OF LAUNCHING THE MEMORIES:

- take off the receiver of telephone
- press the key 1 and verify that the telephone dials the number and calls the good number
- Hang up the receiver
  
- take off the receiver of telephone
- press the key 2 and verify that the telephone dials the number and calls the good number
- Hang up the receiver
  
- take off the receiver of telephone
- press the key 3 and verify that the telephone dials the number and calls the good number
- Hang up the receiver
  
- take off the receiver of telephone
- press the key 4 and verify that the telephone dials the number and calls the good number
- Hang up the receiver

## **16. IN CASE OF PROBLEM**

Before consulting the after-sales service, we advise you to check the following points:

### **LINE OR DIALLING PROBLEM**

- Check the telephone line connection on the connector terminal
- Check that the button is not jammed by a foreign object.

### **TRANSMISSION PROBLEM**

- If transmission from the telephone is weak, check that the microphone holes are not blocked by a foreign object.
- Check the setting of the jumper ST1

### **RECEPTION PROBLEM**

- If telephone reception is weak, adjust the receive volume to the level required

### **IMPORTANT**

**NO INTERVENTION OR MODIFICATION OF THE DEVICE BY YOUR CARE IS AUTHORIZED  
WITHOUT THE AGREEMENT OF the MANUFACTURER.**

## 17. SPECIAL PROGRAMMING

- The telephone can be configured, locally or remotely, for user requirements by programming codes. The most usual programming procedures are described in Section 8.1 Basic Programming on page 19.
- Other programming options, available to the user, are described in the present chapter. The remote-control codes facilitating particular functions are listed below. As a rule, all these codes are 4-digits enveloped by two stars (\*), with the exception of autodial number memories.
- These functions are accessed by an "access code" which can be specific to the user.
- Programming code *STATUS*

**\*10xx\***      Hardware configuration

For each function a value (xx) is designated

xx = 00	DTMF dialling
xx = 01	Pulse dialling
xx = 02	No direct memory access
xx = 04	No cleardown on tone

The sum of these values determines the overall configuration.

Example:

⇒ \*1000\* = DTMF dialling + access to memory 0-9 on keying the corresponding button on the keypad + automatic cleardown on busy tone.

⇒ \*1007\* = Pulse dialling + no memory access + no automatic cleardown.

- Programming code *Ringling*

**\*11xx\***      Number of rings before auto-answer

xx = 00      No ringing before auto-answer

Up to      xx = 98      98 rings before auto-answer

Factory setting      xx = 99      The telephone does not auto-answer

Note: 00 ringing, reserved for the remote diagnostics system.

- Programming code *Time On-Line*

**\*12xx\***      Duration of conversation before auto-cleardown

Factory setting      xx = 00      The telephone is not limited to any duration

xx = 04      Auto-cleardown after 4 minutes

Up to      xx = 99      Auto-cleardown after 99 minutes

- Programming code *Time Silence*

	<b>*13xx*</b>	Length of Silence prior to auto-cleardown
Factory setting	xx = 00	The telephone does not clear down on silence
Example	xx = 30	Auto-cleardown after 30 seconds
Up to	xx = 99	Auto-cleardown after 99 seconds

Note: steady frequency tones, whether cadenced or not, are taken as silence.

- Programming code *Ring Modulation*

	<b>*15xx*</b>	Type of ringing modulation
Factory setting	xx = 00	Pure frequency
	xx = 01	Mixed frequencies

- Programming code *Push Button*

	<b>*17xx*</b>	Continuous time-button <b>M</b> pressed before line taken
Factory setting	xx = 00	Line taken immediately
Up to	xx = 99	Action deferred 9.9 seconds

- Programming code *T1: CHAINING MODE*

	<b>*20xx*</b>	Time in seconds before passing from M1 to M2 to chain autodialling
Factory setting	xx = 00	No number chaining
Up to	xx = 99	99 seconds on M1 before passing to M2

Note: during number chaining, there are two options - if T1 is an even number the loudspeaker reproduces the telephony on the line (dialling-tone, busy, dialling etc...). If T1 is an odd number the loudspeaker generates a cadenced calming tone and the indicator flashes to the same rhythm.

- Programming code *T2: CHAINING MODE*

	<b>*21xx*</b>	Time in seconds before passing from M2 to M3, M3 to M4, up to M8 to chain autodial numbers
Factory setting	xx = 00	No number chaining
Up to	xx = 99	99 seconds on MX before passing to the next

Note: during the chaining of numbers in T2, it is the parity of T1 which determines the telephony on the loudspeaker.

- Programming code *Flashing*

	<b>*24xx*</b>	Duration of Flashing in hundredths of a second
Factory setting	xx = 27	270mS of Flashing
	xx = 00	No Flashing, button R becomes direct memory M1
Up to	xx = 99	990mS of Flashing



- Programming code *TH Access*

	<b>*30xx*</b>	Thousands/hundreds of User Access Code
Factory setting	xx = 12	12
	xx = 10	Minimum value
Up to	xx = 99	Maximum value

Note: The Thousands must never have 0 (zero) as a value.

- Programming code *TU Access*

	<b>*31xx*</b>	Tens and units of User Access Code
Factory setting	xx = 34	34
	xx = 00	Minimum value
Up to	xx = 99	Maximum value

Note: the User Access Code must comprise 4 digits, its value can be between 1000 and 9999. It is therefore programmed in 2 steps (30xx and 31xx).

### CAUTION!

The User *ACCESS CODE* must neither begin with 0 (zero) nor be lost or access to programming will be impossible.

- Programming Code *Cut Line*

	<b>*32xx*</b>	Continuous time button to be pressed for line cleardown
Factory setting	xx = 20	Action deferred 2 seconds
	xx = 00	No cleardown by pressing button
Up to	xx = 99	Action deferred 9.9 seconds

- Programming code *MinTone*

	<b>*34xx*</b>	Minimum cleardown tone frequency
Factory setting	xx = 30	300 Hz
	xx = 00	0 Hz
Up to	xx = 99	990 Hz

- Programming code *MaxTone*

	<b>*35xx*</b>	Maximum cleardown tone frequency
Factory setting	xx = 50	500 Hz
	xx = 00	0 Hz
Up to	xx = 99	990 Hz

- Programming code *Memories*

	<b>*50xx*</b>	
	xx = 00 to 09	According to memory selected
followed by	#11#	Seeks tone
or	#10#	2-second pause before dialling
followed by	1 to 15 digits	Desired Autodial number
terminated by	*	Sequence terminator
Factory setting		All memories blank

To erase a memory:

	<b>*50xx*</b>	
	xx = 00 to 09	According to memory selected
terminated by	*	Sequence terminator

### REMOTE CONTROL CODES

- Remote control code *Test*

	<b>*97xx*</b>	
	xx = 00	Test microphone and loudspeaker

Telephone acknowledgement:

1-second transmission of frequency of 1244Hz

followed by:

1-second transmission of frequency of 622Hz

Note: at the end of this remote control sequence the telephone loudspeaker is cut.

- Remote control code *Erase*

	<b>*98xx*</b>	
	xx = 00	Return telephone to factory setting
Telephone acknowledgement:	*	After about 1.3 sec
	xx = 02	Memories M0-M9 erased

- Remote control code *Special*

	<b>*99xx*</b>	
	xx = 00	Clear down the telephone automatically
	xx = 01	Reinstate loudspeaker

Note: this remote control code is used to reactivate the telephone loudspeaker when it has been cut by a loudspeaker test (\*9700\*)