

Robust, weather-resistant telephone

ResistTel





Foreword

Our weather-resistant telephone is a captivating product on account of its precision, convenience, long service life and reliability. It is freely programmable and the optimum choice for adverse ambient conditions. Be it seawater, high atmospheric humidity, dust or the toughest mechanical strains, the weather-resistant telephone accomplishes its aim in any conditions. The reason for this is the robust keypad made of V4A steel and an extremely solid housing made of impact-resistant and shockproof cast-moulding material. All of the components utilised are even resistant to leeches and lubricants. The 21-component V4A-steel keypad - which can be operated by a user wearing gloves - and the easily readable alphanumeric display as well as the uncomplicated menus all ensure simple operation - thus fulfilling the requirements for a leading-edge and operationally reliable means of communication. As a telephone suitable for connecting to the public telephone network and to private automatic branch exchanges, the ResistTel always ensures reliable connections.

ResistTel ZB is designed for telephone exchange operation and corresponds to the ResistTel, except for keypad and display.

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General operating instructions

- Both the weather-resistant ResistTel telephone and the ZB version are designed for connection to dial ports with analogue connection points.
- 2. The handset is fitted with a stray-field coil for connecting hearingaids. People who use hearing-aids which have an inductive receiver can receive the earphone signal directly.
- The optional, external loudspeaker has three operating modes calling/ringing, open listening and hands-free. If the external loudspeaker is switched on, the internal loudspeaker volume will be reduced.
- 4. The ZB version is not equipped with keypad and display, therefore not all the features are available with this version.
- 5. The ResistTel has a handset module with a dry reed contact as a hook switch. In order to terminate an existing call connection, the handset must be hung up. In order to interrupt an existing call connection, it is sufficient to press the clearing key on the keypad.(see page 8)
- 6. Use the menu to program the appropriate settings. To access the menu, pick up the handset and press the "YES" key.
- 7. If you take longer than 2 minutes before you begin making a choice, the power supply of the exchange may be switched off. If that occurs, you will no bnger hear a dialling tone. In that case, please replace the handset and wait 2 seconds before picking it up again.
- 8. When a setting is stored successfully, this is confirmed by an acknowledgement tone.
- 9. When you receive a call, the ResistTel rings at the ringer-volume level selected by you and, for the duration of the calling sound, the symbols (((👢))) appears on the display.
- 10. If you enter a PIN with the menu you can restrict or block dial functions. Forgetting the PIN is the equivalent of losing a key. If you forget the PIN, please contact our technical support.
- 11. You have a guarantee period of 24 months commencing from the date of purchase. If you have a problem, please contact our technical support in Sweden

Telephone: +46 (0)660 29 29 00 Fax: +46 (0)660 850 85

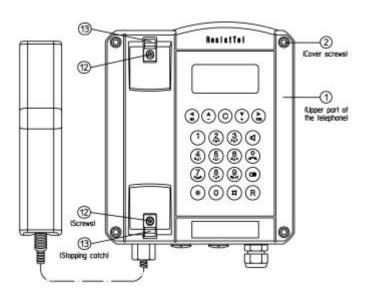
e-mail: info@malux.se

If a fault occurs which cannot be rectified by telephone, please send the whole telephone along with a copy of the sales receipt to the following address:

Malux Sweden AB Support ResistTel Åsvägen 30 SE-891 30 ÖRNSKÖLDSVIK Sweden

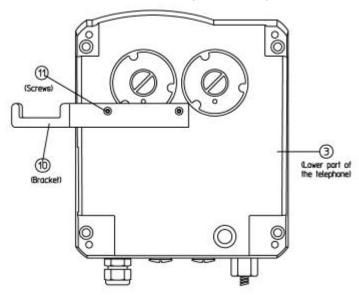
If, on examination of the telephone, it is discovered that a fault is not the case, you will be charged a service fee.

Overview of the device

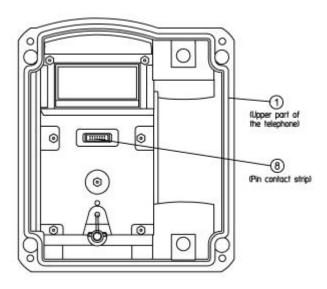


Note: In case of the ZB version, the keypad and display are replaced by a solid metal plate.

Outside view of telephone lower part

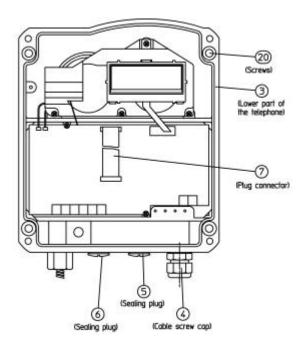


Inside view of telephone upper part



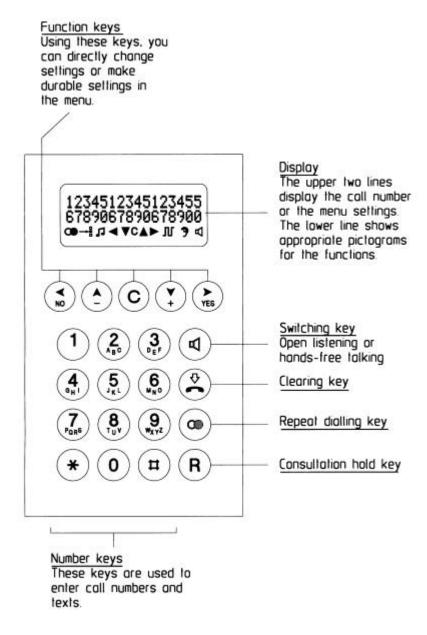
Note: The ZB version is not equipped with a pin contact strip.

Inside view of telephone lower part



Note: The ZB version is neither equipped with a plug connector nor a display.

Display and keyboard (expect for ZB version)



Contents after unpacking

The delivery includes:

- ResistTel telephone
- Operating instructions
- 2 self-adhesive lettering plates

ZB version notes

The ResistTeI / ZB connects – depending on the features of the PABX – with the PABX while lifting the handset. The ResistTeI / ZB can be called also, because the ringing circuit is built in.

Furthermore there are interfaces for operating an optional additional earpiece, an optional secondary ringer and an optional external loudspeaker.

The operating mode "external loudspeaker" is set up by bridging the terminals 9 and 10 (HSS1,HSS2). With the ZB version this is equivalent to the open listening mode. The ringer sound is also output via the external loudspeaker.

Note:

The set up of the external loudspeaker reduces the volume of the internal ringer even if the external loudspeaker is not connected.

Thus the ZB version offers the following features:

- · Establishing a connection by lifting up the receiver
- Ringing by means of integrated ringing device
- · Connection of additional earpiece
- Connection of secondary ringer
- Connection of external loudspeaker

Assembly and installation

The device must be installed on a plane surface only, in vertical operating position. Loosen the cover screws (2) (see overview of the device on page 5 to 7). and detach the upper part of the telephone (1). If the optional accessory headset or a second ear piece is being employed, attach the bracket (10) using two screws (11) to the rear panel of the lower part of the telephone. (With the accessories named before, the bracket and screws are in the scope of delivery. With all accessories a cable gland is delivered.) Plug the lower part of the telephone (3) into the opening (20) using four screws having a head diameter of 10 to 13 mm and attach it to the wall or to a holder.

Guide the telephone wire through the cable screw cap (4) and place it on the terminals 13 and 14 (A, B) in accordance with the connection diagram. Only wires having a sheath diameter of 5 to 9 mm should be used because otherwise the IP66 housing protection standard is not guaranteed.

Connecting a secondary ringer (bell-shunt) (optional accessory)

Remove the sealing plug (5) and tighten the M20x1.5 cable gland cap. Insert the wire of the secondary ringer and place it on the terminals in accordance with of the connection diagram. Only utilise wires which have a sheath diameter of 5 to 9 mm because otherwise the IP66 housing protection standard is not guaranteed.

Connecting an external loudspeaker (optional accessory)

Remove the sealing plug (6) and tighten the M20x1.5 cable gland cap. Insert the wire of the loudspeaker and place it on the terminals 11 and 12 (SPK+,SPK-) in accordance with the connection diagram. Only utilise wires which have a sheath diameter of 5 to 9 mm because otherwise the IP66 housing protection standard is not guaranteed.

Connecting a headset (optional accessory)

Remove the sealing plug (6) and tighten he M20x1.5 cable gland cap. Guide the specially-manufactured wire with the headset socket (included in the delivery of the headset) through the cable screw cap and place it on the terminals 5 through 10 in accordance with the connection diagram. Only the wire included in the delivery for the headset should be used because otherwise the IP66 housing protection standard is not guaranteed.

Connecting a second ear piece (optional accessory)

Remove the sealing plug (6) and tighten the M20x1.5 cable gland cap. Insert the wire of the second ear piece and place it on the terminals 7 and 8 (HSM+, HSM-) in accordance with the connection diagram.

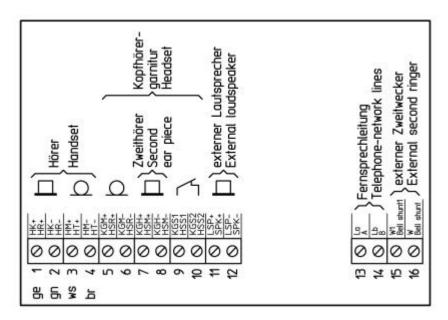
Prior to assembly, check cover seal for tightness.

Using the plug connector (7), plug the ribbon cable onto the pin contact strip (8) in the upper part of the housing.

Attach the upper part of the telephone and fasten it to the lower part of the telephone with the four cover screws (2).

Upon disassembly of optional accessories, suited blind plugs must be used to close the resulting openings.

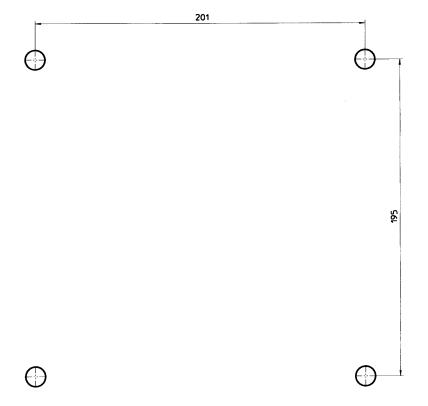
Connection diagram



Sling holder

The holding strength for the handset is continuously adjustable. Loosen the screws (12) and move the stopping catches (13). Pushing the stopping catches together increases the holding strength whereas pulling them apart reduces it. Tighten the screws again.

For making a drilling template please use the following dimensions (in mm).



The diameter of the drilled hole is dependent on the screw employed (screw diameter max. 8mm) and the type of supporting base material (steel, wood, concrete, plasterboard etc.) and must be chosen accordingly.

Handset mode (except ZB version)

When you pick up the handset, you are in handset mode. Using the keys and you can adjust the handset volume for talking. If you wish to durably change the handset volume, use the menu "Settings / Handset volume". Using the key you can switch into open listening mode. If you keep the key depressed and replace the handset, you switch to hands-free talking mode.

Open Listening mode (except ZB version)

Using the keys and , you can adjust the loudspeaker volume for talking. If you wish to change the loudspeaker volume durably, use the menu "Settings / Loudspeaker". The handset volume cannot be changed in open listening mode. Using the key , you can switch to handset mode. If you keep the key depressed and replace the handset, you switch to hands-free-talking mode.

Hands-free mode (except ZB version)

If you switch on the ResistTel using the key you are in hands-free-talking mode. Using the keys and you can adjust the loudspeaker volume for talking. If you wish to durably change the loudspeaker volume, use the menu "Settings / Loudspeaker". You end the call using the key . If you pick up the handset, you switch to handset mode.

Working with the headset (except ZB version)

If the headset has been connected correctly, it takes the place of handsfree talking. For this reason, hands-free talking with the headset is not possible. If you switch on the ResistTel with the key , you are operating in headset mode. If you lift the handset while in headset mode, the handset assumes a higher priority. That means that it is possible to speak and listen using the handset but, in this mode, it is only possible to listen with the headset.

Comparison of the operating states without and with connected headset:

Operation without the headset	Operation with the headset
Handset mode	Handset mode with the headset
	Handset can speak and listenHeadset can only listenLoudspeaker is off
Open Listening mode	Open Listening with the headset
	- Handset can speak and listen - Headset can only listen - Loudspeaker is on
Hands-free mode	Headset mode
	Handset is replacedHeadset can speak and listenLoudspeaker is off

Using the keys and you can adjust the headset volume for talking. If you wish to durably change the headset volume, use the menu "Settings / Headset Volume". You end the call using the key.

Menu (except ZB version)

Starting the menu

Press the key 🚳.

You are now situated in the main menu.

The top line of the display indicates the menu in which you are located.

The lower line indicates which menu item is selected.

Selecting menu items

Press the key 🖎 or 🖫.

The upper line of the display remains unchanged. In the lower line, the menu items available for selection change with each key-press.

Activating a menu item

Press the key 🔊.

The menu item which was indicated in the lower line is now located in the upper line. In the lower line, you see the additional options available.

Exiting the menu

Press the key ...

With each key-press, you jump to the previous menu. When you arrive back in the main menu, you exit it with the next key-press ...

Main Menu (except ZB version)

With the aid of the key or , you can make selections under the following items:

Telephone Book
 For selecting a telephone number from the

telephone book memory.

Change Phonebook For creating new telephone book entries

For modifying existing telephone book entries For deleting existing telephone book entries

Lock / PIN
 For changing to the submenu Direct call

For setting the complete lock

To permit selections from the telephone book

only

For changing the PIN

Settings
 For adjusting the ringer volume and changing

the melody

Adjust the loudspeaker volume Adjust the handset volume Adjust the headset volume Adjust the LCD contrast Set the dialling method

Set the flash time

Set the exchange number and pause

Restoring to the default dettings

Switch on/off an external loudspeaker

Wecome text

• Languages For selecting the menu language German

For selecting the menu language English

When you select an item, you can activate it with the key . You can exit the menu with the key .

Submenu - Telephone Book (except ZB version)

You have the option of dialling up to 50 telephone numbers from the telephone book. To store and/or change numbers, see the menu item "Change telephone book".

You can select from the telephone book entries using the key 🖎 or 🖫.





Examples:

FIRE BRIGADE dials the telephone number shown on the display 999

dials the telephone number shown on the display SECURITY 110

dials the telephone number shown on the display FHF VELBERT 004920512700

dials the telephone number shown on the display CANTEEN 123

etc. dials the telephone number shown on the display

When you have selected a telephone number to call, you can dial it by pressing the key . You can exit the menu using the key .

Submenu - Change Telephone Book (except ZB version)

You can store up to 50 telephone numbers and their associated names. Enter the numbers and names in their order of importance because they later appear on the display in the order in which they were entered (e.g. fire brigade before canteen).

Caution: The menu item "Default Settings" deletes all telephone book entries.

With the aid of the key or , you can make selections under the following items:

New Entry
 Change Entry
 Delete Entry
 To make a new entry
 To change an entry
 To delete an entry

Delete All To delete the entire telephone book

Submenu - Lock / PIN (except ZB version)

When you call up the menu "Lock / PIN", you are prompted to enter the PIN. The PIN consists of 4 digits. In the state when delivered, the PIN is "0 0 0 0".

If you change the PIN, don't forget the new PIN. Forgetting the PIN is the equivalent of losing a key. If you forget the PIN, please contact our technical support.

Technical support in Sweden:

Telephone +46 (0)660 29 29 00 Fax +46 (0)660 850 85 e-mail info@malux.se

When you have entered the PIN, you can make selections under the following items with the aid of the key () or ():

Direct Call
 To switch on the direct call

To enter the direct call number

• Total Lock Locks the telephone preventing all outgoing calls

Caution: It is also not possible to dial emergency

telephone numbers

Directory Only Only permits outgoing calls to numbers contained

in telephone book

Change PIN To change the PIN

When you have selected an item, you can activate it by pressing the key . You can exit the menu using the key .

Note:

The menu item "Default Settings" resets all settings except, however, the PIN you may have changed.

Submenu - Settings (except ZB version)

With the aid of the key or , you can make selections under the following items:

Ringer - For setting the ringer volume

- For setting the ringer melody

Speaker Volume - For setting the loudspeaker volume

Handset Volume - For setting the handset volume

Headset Volume
 LCD Contrast
 For setting the headset volume
 For setting the display contrast

Dialling - Dialling method DTMF/ duration 90ms

Dialling method Pulse Dial 2:1Dialling method Pulse Dial 1.5:1

- Dialling method DTMF / duration 70ms

Dialling method DTMF / duration = keypress

Flash time - Set the flash time, 40ms to 399ms

PABX Settings - Entry of the exchange number

- Deletion of the exchange number

- Setting the dialling pause after the exchange

number

Defaults - Reset to the state when delivered

External Speaker - Switch on/off an external loudspeaker

Note:

The optional, external loudspeaker has three operating modes callig/ringing, open listening and hands-free. If it is switched on, the internal

loudspeaker volume will be reduced.

Welcome text

 input of an individual text, which is indicated in the display after taking off the handset.

For example:

BRANCH 170

EXTERNAL DEPOT

When you have selected an item, you can activate it by pressing the key . You can exit the menu using the key ...

Submenu - Languages (except ZB version)

You can make selections under the following items with the aid of the key (a) or (3):

German
 English
 For setting the menu language to English

When you have selected an item, you can activate it by pressing the key . You can exit the menu using the key ...

Default Settings

To enable you to use the telephone immediately after connecting it, we have made default settings for general utilisation purposes.

Using the menu, you can alter these default values in accordance with your own personal necessities and connection requirements.

Upon delivery of the telephone, the following default values are set:

Telephone book: deleted
Repeat dialling: deleted
Direct call number: deleted
Exchange number: deleted
Ringer melody: 0

Ringer volume:Handset volume:0 (maximum value)

Headset volume: 2Loudspeaker volume: 4

External loudspeaker: switched offWelcome text FHF Velbert

Dialling method:
 DTMF, signal duration 90ms

• Flash time: 80ms

LCD contrast: 5 (normal value)
Pause length after exchange number: 3 seconds
PIN: 0000

Caution!

Resetting to the default settings via the menu restores these default values with the exception of the PIN:

• The PIN is not changed.

Menu overview (except ZB version)

Main Menu		
Telephone Bool	<	
Name #1		Telephone book entry #1 is dialled
То		To
Name #50)	Telephone book entry #50 is dialled
Change Teleph	one Book	·
New Entr		Add a new entry to the telephone book
Change E	ntry	A telephone book entry is changed
Delete En	try	A telephone book entry is deleted
Delete All	•	The entire telephone book is deleted
Lock / PIN		
Direct Cal	l	
Act	ivate	The direct call is switched on
Cha	ange Number	Change or enter the direct call number
Total Lock		The telephone is locked completely
Directory	Only	Telephone is locked except for numbers
		in the telephone book
Change P	IN	The PIN is changed (default 0000)
Settings		
Ringer		
	ume	The ringer volume is set
Mel	ody	The ringer melody is set
Speaker \		The loudspeaker volume is set durably
Handset \		The handset volume is set durably
Headset \		The headset volume is set durably
LCD Conf	trast	The LCD contrast is set
Dialling		
	√IF 90ms	Sets the dialling method to DTMF 90ms
	se Dial 2.0 : 1	Sets the dialling method to PDM 2: 1
	se Dial 1.5 : 1	Sets the dialling method to PDM 1.5: 1
	/IF 70ms	Sets the dialling method to DTMF 70ms
I DTN	ΛIF	Sets the dialling method to DTMF
_ _	_	unlimited
Flash Time	е	Set the flash time to between 40 and
DARY Car	ttin an	399ms
PABX Set	=	
	er Exchange Code	Entry of an exchange number
	ar Exchange Code	The exchange number is deleted
	ise Exchange Code	Set dialling pause to between 1 and 6s
Defaults		Resets to the state when delivered and
	lor	the telephone book is deleted
Ext. Spea		Switch on/off external loudspeaker
Welcome	lext	change
Languages		Manuslanawa Oamaan in anti- t
German		Menu language German is activated
English		Menu language English is activated

Technical data

Note:

Except for ZB version for items marked with an asterisk *).

Connection data	
Supply voltage	24 V _{DC} to 66 V _{DC}
Supply current	15 mA _{DC} to 100 mA _{DC}
Ringer voltage	24 V _{AC} to 90 V _{AC} (calling frequency 2154 Hz)
	30 V _{AC} to 90 V _{AC} (calling frequency 16.654 Hz)
Ringer impedance	Greater than 6.0 K Ω at 25 Hz and 2490 V _{AC} .
	Greater than 4.0 K Ω at 50 Hz and 2490 V _{AC} .
Consultation hold	Flash function adjustable from 40ms to 399ms via
key *)	the menu.
Dialling method *)	PD or DTMF mode can be set via the menu.
	DTMF mode in accordance with CCITT
	recommendation Q.23.
	Pulse Dial mode with pulse pause ratio 1.5:1 or
	2:1 (adjustable via the menu).
Exchange number*)	An exchange number and dialling pause are
	programmable to between 1 s and 6 s via the
	menu.
Bell-Shunt	Possibility for connecting a second external ringer.
External speaker	Terminals for the connection of an external
	speaker (optional accessory).
Headset *)	Terminals for the connection of a headset
	(optional accessory).
	Note: A headset or a second ear piece can be
0	connected, but not both simultaneously!
Second ear piece	Terminals for the connection of a second ear piece
	(optional accessory). Note: A headset or a second ear piece can be
	· ·
Connection	connected, but not both simultaneously! Up to 4mm ² inflexible.
terminals	Up to 2.5mm ² flexible.
Housing	ор to 2.5ППП пехіоне.
Material	Glass-fibre-reinforced polyester
Height x width x	approx. 260mm x 228mm x 135mm
depth	approx. 20011111 x 22011111 x 133111111
Weight	approx. 5.5kg
Display *)	2-line alphanumeric display with pictograms.
Diopidy /	Field of view approx. 78mm x 26mm.
Keyboard *)	- Metal keyboard with protection against ice.
1 toyboard /	- 21 keys with ABC inscription for name entries.
	21 keye man Abo moonphon for name chales.

Position of	Mounted upright on the wall. The device must be
operation	mounted on a plane surface only.
Handset	
Sling protection	Integrated, adjustable sling protection.
Handset cord	Steel-reinforced steel-clad cord made of V4A.
Earphone	Dynamic capsule with stray-field coil for the
	inductive connection of hearing-aids.
Microphone	Electret microphone
capsule	
Noise suppression	Greater than 3 dB by integrated speak-in horn.
Ambient conditions	
Protection type:	IP 66 as per EN60529
Protection against	IK 09 as per EN50102
external	
mechanical impacts	
Operating	-25°C to +60°C
temperature:	(display does not operate below -20°C)
Storage	-25°C to +70°C as per IEC60721
temperature:	
Additional features	
Clearing key *)	Separate key
Hook switch	Dry reed contact without a mechanical cradle
Power supply	- from the analogue telephone network.
	- no additional mains supply required.
Meter-pulse lock	- Electrical attenuation for 12 kHz and 16 kHz on the earphone greater than 30 dB with respect to 1 kHz Impedance (telephone connections A, B):
	approx. 13 K Ω (1 V _{eff} ; 12 kHz; idle state) approx. 4 K Ω (10 V _{eff} ; 12 kHz; idle state) approx. 2.5 K Ω (1 V _{eff} ; 12 kHz; during a call) approx. 2.3 K Ω (10 V _{eff} ; 12 kHz; during a call)
	approx. 11 K Ω (1 V _{eff} ; 16 kHz; idle state) approx. 4 K Ω (10 V _{eff} ; 16 kHz; idle state) approx. 2.5 K Ω (1 V _{eff} ; 16 kHz; during a call) approx. 2.3 K Ω (10 V _{eff} ; 16 kHz; during a call)
Optical call *) signalling	Display indicates (((👢)))

Ringer volume	 Approx. 95dB(A) at a distance of 1m at 50 V_{AC} / 50 Hz (In the default settings. The maximum volume is also dependent on the selected melody and on the power-supply conditions). 6-step volume and mute mode can be set via the menu. (The ringer volume is reduced by approx. 13 dB(A) if the optional external loudspeaker is switched on in the menu).
Ringer melodies *)	10 melodies can be selected via the menu.
Open Listening	 - Maximum volume approx. 70dB(A) at a distance of 1m - 7-step volume can be set via the menu. *) - Durable setting via the menu *) (The internal loudspeaker volume is reduced if the optional external loudspeaker is switched on in the menu).
Hands-free *)	 Function possible where ambient noise do not exceed 70 dB(A). (at greater noise levels, it is not possible to understand the telephone conversation in handsfree mode). Maximum loudspeaker volume approx. 70dB(A) at a distance of 1m 7-step volume can be set via the menu. Durable setting via the menu (The open listening volume is reduced if the optional external loudspeaker is switched on in the menu).
Handset loud function *)	Handset volume from 0dB to +12dB.7-step volume can be set via the menu.Durable setting via the menu.
Menus *)	In German and English.An audible signal is given if programming was successful.
Telephone book *)	- A maximum of 50 entries with name and telephone number.

Guidelines and regulations

Conformity to the following guidelines and regulations:

- R&TTE guideline -1999/5 EG
- Low voltage guideline 73/23/EWG
- EMC guideline RL89/336/EG for the domestic / residential and industrial areas
- ETSI TBR 38: May 1998 (acoustics)
- ETSI TBR 21: January 1998 (telephone-network access) but without device-internal DC limitation to 60mA (see TBR21 item 4.7.1 DC characteristics)

Advisory notes ETSI EG 201 121 V1.1.2 (1998-07):

- ATAAB AN 003, 004, 013 relevant to all countries
- ATAAB AN 005, 006, 007, 009, 010 and DE 03, 04,05, 08, 09, 12, 14, 17 for Germany
- FTZ 121TR8: May 1994 Part 2.1 and 2.2 for the performance feature open listening
- FTZ 121TR8: May 1994 Part 2.1, 2.2 and 3 for the performance feature hands-free talking
- Pulse dialling method in accordance with BAPT 223 ZV5 version 07.96 (where dialling method PDM 1.5:1 is set)
- Pulse dialling method in accordance with BS6305:1982 with change AMD 4558:1984 (where dialling method PDM 2:1 is set)
- Meter-pulse lock for 12 kHz BAKOM 337/2.2:12/97
- Meter-pulse lock for 16 kHz in the general meaning of BAKOM 337/2.2:12 / 1997
- FTZ 121TR8: November1993 Part 3.1 for the magnetic field generator in the handset

Service

You have purchased a state-of-the-art product manufactured by **FHF** and subject to stringent quality controls. If you have questions regarding the telephone or if a malfunction has occurred - even after the guarantee period - please contact **FHF** (see page 4). Please have the type and article number ready (these numbers can be found on the type plate) when you contact us.

Maintenance and servicing

The telephone is maintenance-free. Nevertheless, if the telephone is deployed in areas with significant impurities due to dust, grease, oil etc., then it should be cleaned from time to time. The handset and the telephone should be wiped with a damp cleaning cloth. *Caution!* Never use sharp objects for cleaning.

Waste disposal

The device may be completely recycled as electronic waste. Upon disassembling the device, the plastic, metal and electronic components must be disposed of separately.

In every single case the national requirements and regulations for waste disposal must be observed.

The waste-disposal requirements of your country must be observed.

Warning and safety instructions

This equipment is a weather-resistant telephone specifically designed for operation in a harsh industrial environment. The following warning and safety instructions must be heeded:

- The telephone is constructed in protection class II and must only be connected to and operated with the stipulated voltage. A proper connection must be ensured. The connection wire must be laid in such a manner that there is no danger of stumbling.
- The telephone must only be operated under the specified ambient conditions (see section "Technical data"). Adverse ambient conditions, such as e.g. ambient temperatures which are too high or too low, are not permissible because this promotes the failure of electronic components.
- It must be ensured that the telephone, the connection wire etc. are not damaged. It is not permissible to operate the telephone in a damaged state.
- 4. When operating the telephone, please heed the legal and commercial / industrial regulations, accident-prevention regulations and electrical regulations / provisions.
- 5. Repairs are only permissible with original spare parts which must be replaced by a specialist. Other replacement parts can cause damage and render the guarantee invalid.

- Before repair is performed or before replacement of the telephone, it
 must be disconnected from the voltage supply. If it is unavoidable
 that the power be switched on during servicing or repair, then this
 must only be performed by suitably trained specialist personnel.
- The stipulated position of utilisation must be adhered to. The telephone must be installed on a plane surface only, in vertical operating position.
- 8. In the open state of the telephone no dust may ingress the device.
- Upon mounting or demounting the device, do not damage the cover seal, which keeps the cover tight, or the collar on the lower part of the housing.
- 10. Magnetic fields with energy technical frequencies can cause a slight impairment of the listening quality. If this is the case, please ensure that the telephone is installed at a suitable location.
- 11. Changes to the product which are in the interests of technical progress are possible even without prior notice.

CE symbol

The ResistTel fulfils the requirements of the R&TTE guideline - 1999/5 EG (Radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity)

The conformity of the ResistTel with the above-mentioned guideline is confirmed by the CE symbol.

The telephone was tested in accordance with the relevant national and international regulations for England and Germany. Any person in England or Germany only may connect the ResistTel to the telephone network.

The making of country-specific settings is not necessary in the state when delivered. Nonetheless, the relevant applicable menu language (German or English, see page 21) should be set.

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