

Macro functions

Operating instructions
English

Declaration of conformity and CE mark

This device meets the requirements of the following EC directive R&TTE 6/3/EG:

»Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity«.

You can also request this EC declaration of conformity at the following Internet URL: <http://www.bintec-elmeg.com>.



The waste container symbol with the “X” through it on the device indicates that the device must be disposed of separately from normal domestic waste at an appropriate waste disposal facility at the end of its useful service life..



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Programming macro functions

You can configure the existing function keys of your telephone and of the keypad extension as self-programmed function keys. These self-programmed functions are called macro functions (macros). Macros allow you to save set routines and assign them to a specific function key. For example, you can save frequently used codes for your PABX system as a macro and call it up at a later time by pressing the corresponding function key. In addition, you can also save set operating function at your telephone, such as getting to certain menus, as a macro.

Conditional execution of macro functions (CS410, CS410-U only)

With these macro functions, the system checks whether a specified condition is fulfilled. These macros can consist of two parts. The commands for the condition that has been fulfilled are stored in the first section. The second section contains the commands that are to be executed if the condition has not been fulfilled and is initiated using the »ELSE« command. (Either-Or-function)

Structure (symbolic):

»IF« (condition) - commands for fulfilled condition
 »ELSE« commands for unfulfilled condition.

When the set condition has been fulfilled the commands that have been stored will be executed until the end of the macro, or up to the »ELSE« command. If the condition is not fulfilled only the commands after the »ELSE« command will be executed. These commands can also be located at a different macro key (for example, the second level for the same key).

Condition 1:

LED for the first level of the corresponding key is not lit (»IFLA«)

The commands in front of »ELSE« will only be executed if the LED for the first key level is switched off. The corresponding LED will be activated automatically prior to ending the macro. If the LED is already activated, only the commands that follow »ELSE« (where present) will be executed. In this case, the corresponding LED will be de-activated automatically prior to ending the macro.

Condition 2:

LED for the first level of the corresponding key flashes (»IFLB«)

The commands before »ELSE« are only executed when the LED for the first key level is flashing. If this LED is not flashing only the commands after »ELSE« will be executed.

Commands and keys for macro programming

A macro consists of various commands, or key strokes, that are compiled into one command sequence and stored under a defined function key. When this function key is pressed, the individual commands contained in the macro are executed one after the other.

The following commands are available for macro programming

- »B« Initiating a call (same as lifting the handset)
- »D« Ending a call (same as replacing the handset)
- »ELSE« Alternative commands, if a required condition (e.g. »IFLA« or »IFLB«) is not fulfilled.
- »IFLA« Execute this macro only when the LED for the first level is off (»IFLA«) or flashes (»IFLB«). If this condition is not fulfilled execution is either discontinued, or resumed after the »ELSE« command.
- »IFLB« Execute this macro only when the LED for the first level flashes (»IFLB«).
- »K« Keypad sequence; All of the following characters / digits are transmitted as a keypad sequence.
- »LA« Deactivate the LED for the corresponding function key.
- »LB« The LED for the corresponding function key flashes.
- »LE« Activate the LED for the corresponding function key.
- »LZ« Activate the LED for the corresponding function key for 2 seconds.

- »n« Dummy number; If a number is entered prior to execution of a macro (or for example, dialed from the telephone) this number is used in place of the dummy number in the macro.
- »P« Pause (1 second) in the command sequence (between two characters/commands)
- »RE« Re-establish the phone's idle state.
If there is an active connection at this phone, execution of this macro is canceled at this point.
- »SE« Activating the speaker (normal volume)
- »SA« Activating the speaker (low volume)
- »T« DTMF sequence; All of the following characters / digits are transferred as DTMF dialing.
- »TS« Testing a connection.
If there is currently no connection active, or an outgoing connection can not be set up (for example subscriber busy), execution of the macro is canceled at this point.

If you wish to incorporate a telephone key into a macro, press the corresponding key during macro programming. All keys used for operating the telephone during macro programming (e.g. save, change entry position, delete entry or cancel) cannot be incorporated into the macro by simply actuating them.

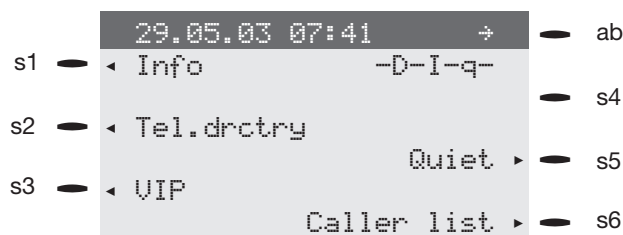
The following commands are therefore available for these keys.

- »C« Actuation of the C- button.
- »esc« Actuation of the ESC- button.
- »f« Actuation of the F-key or the menu button.
- »{« Actuation of the left arrow button.
- »ok« Actuation of the OK button.
- »}« Actuation of the right arrow button.
- »sh« Selection of the second function key level (actuation of the sift key or double button actuation).

Key assignments for macro programming are as follows:

Key	Press						
	1	2	3	4	5	6	7
1	1						
2	2	B	c				
3	3	D	ELSE	esc	f		
4	4	IFLA	IFLB				
5	5	{	K	LA	LB	LE	LZ
6	6	menu	N	ok			
7	7	}	P	RE	SA	SE	sh
8	8	t	TS				
9	9						
0	0						
*	*						
#	#						

Softkey positions



Macro programming examples (CS300)

Note that some of these examples only apply to macros used with specific elmeg PABX systems. The content of the macros may be different for other PABX systems.

Function	Macro command string
Access to the PABX's telephone directory SC range	RE,}},s4,1,7,7,7,2,2,2,4,4,ok
Show telephone book entry during an ongoing call (the LED lights up for 2 seconds)	F, F, S3, S1, S3, LZ
Activate »immediate« service-specific call forwarding (modular pabx systems for example) PIN »0000«, Module »0«, Connection »4«, Dial number index »5«, Service »02«, »N«: Destination of call forwarding, (key for level 1, activate LED)	B,*,*,0,0,0,0,7,1,0,4,5,0,2,N,#,LE,D
Delete »immediate« service-specific call forwarding (modular pabx system) PIN »0000«, Module »0«, Connection »4«, Dial number index »5«, Service »02« (key for level 2, deactivate LED)	B,*,*,0,0,0,0,7,1,0,4,5,0,2,#,LA,D
Activate door terminal 1 / switching contact 1 (key for level 1, activate LED)	B,*,9,7,0,1,LE,D
Deactivate door terminal 1/ switching contact 1 (key for level 2, deactivate LED)	B,#,9,7,0,1,LA,D
Call mode »Day« für door terminal 1 / doorbell 1 (key for level 1, activate LED)	B,*,9,6,1,,1,LE,D
Call mode »Night« for door terminal 1 / doorbell 1 (key for level 2, deactivate LED)	B,#,9,6,1,,1,LA,D
Actuate door terminal 1 / door opener (LED lights up for 2 seconds)	B,*,9,9,LZ,D
Hotel function: Check-in for room number »N« Key for level 1, activate LED	RE,}},s4.7,N,ok,1,ok,LE
Hotel function: Check-out for room number »N« (key for level 2, deactivate LED)	RE,}},s4.7,N,ok,2,ok,LA
Update LCR tariff tables »N«: 6-digit PIN for the PABX system	RE,}},s4,6,2,N,ok,ok

Function	Macro command string
Enable the PABX for dial-in by the service center	B,* ,7,8,2,D
Key programmed for a particular number (for example: 0190510110 and activate LED for two seconds)	RE,B,0,1,9,0,5,1,0,1,1,0,LZ
Program an appointment reminder	RE,f,s2,s4
Read new text messages (UUS)	RE,,},},s1,s1
Write new text messages (UUS)	RE,,},},s1,s4
Program a macro key	RE,f,s3,s3},s3
Add an entry to the telephone directory	RE,f,s3,s1,s4
Activate headset operation (key for level 1, activate LED)	RE,f,s2},s4,s4, s4,LE,esc
Deactive headset mode (key for level 2, deactivate LED)	RE,f,s2},s4,s4, s1,LA,esc
Inhibit the phone for all outbound calls »N«: PIN for the telephone directory (key for level 1, activate LED)	RE,f,s4},s2,N,ok,s4,s3,LE,esc
Re-enable the telephone for outbound calls »N«: PIN for the telephone directory (key for level 2, deactivate LED)	RE,f,s4},s2,N,ok,s4,s1,LA,esc

Macro programming examples (CS310, CS320)

Note that some of these examples only apply to macros used with specific elmeg PABX systems. The content of the macros may be different for other PABX systems.

Function	Macro command string
Access to the PABX's telephone directory SC range	RE,},,s3,1,7,7,7,2,2,2,4,4,ok
Show telephone book entry during an ongoing call (the LED lights up for 2 seconds)	F, F, S6, S2, S6, LZ
Activate »immediate« service-specific call forwarding (modular pabx systems for example) PIN »0000«, Module »0«, Connection »4«, Dial number index »5«, Dienst »02«, »N«:Destination of call forwarding, (key for level 1, activate LED)	B,*,*,0,0,0,0,7,1,0,4,5,0,2,N,#,LE,D
Delete »immediate« service-specific call forwarding (modular pabx systems for example) PIN »0000«, Module »0«, Connection »4«, Dial number index »5«, Dienst »02« (key for level 2, deactivate LED)	B,*,*,0,0,0,0,7,1,0,4,5,0,2,#,LA,D
Activate door terminal 1 / switching contact 1 (Key for level 1, activate LED)	B,*,9,7,0,1,LE,D
Deactivate door terminal 1/ switching contact 1 Key for level 2, deactivate LED)	B,#,9,7,0,1,LA,D
Call mode »Day« für door terminal 1 /doorbell 1 (Key for level 1, activate LED)	B,*,9,6,1,,1,LE,D
Call mode »Night« for door terminal 1 / doorbell 1 (key for level 2, deactivate LED)	B,#,9,6,1,,1,LA,D
DOORLINE 1 / Actuating door opener (LED lights up for 2 seconds)	B,*,9.9,LZ,D
Hotel function: Check-in for room number »N« Key for level 1, activate LED	RE,},s3.7,N,ok,1,ok,LE
Hotel function: Check-out for room number »N« (key for level 2, deactivate LED)	RE,},s3.7,N,ok,2,ok,LA
Update LCR tariff tables »N«: 6-digit PIN for the PABX system	RE,},s3,6,2,N,ok,ok
Enabling the PABX for dial-in by the service center	B,*,7,8,2,D
Key programmed for a particular number (for example: 0190510110 and activate LED for two seconds)	RE,B,0,1,9,0,5,1,0,1,1,0,LZ
Setting an appointment	RE,f,s3,s5«
Reading new text messages (UUS)	RE,},},s1,s1
Writing new text messages (UUS)	RE,},},s1,s4

Function	Macro command string
Programming a macro key	RE,f,s3,s3,},s3
Adding an entry to the telephone directory	RE,f,s6,s2,s5
Activate headset operation (Key for level , activate LED)	RE,f,s3,s1,s4,s5, LE,esc
Deactivating headset mode (key for level 2, deactivate LED)	RE,f,s3,s1,s4,s2,LA,esc
Inhibit the phone for all outbound calls »N«: PIN for the telephone directory (Key for level 1, activate LED)	RE,f,s5,s1,N,ok,s5,s6,LE,esc
Re-enable the telephone for outbound calls »N«: PIN for the telephone directory (key for level 2, deactivate LED)	RE,f,s5,s1,N,ok,s5,s2,LA,esc
Answering machine dictation key	RE,AB,s3,},},s4,s2
Listen to messages	RE,AB,s2
Forwarding for new messages »N«: Number of the forwarding target, forwarding with 5 new messages	RE,AB,},s2,N,s2,s2,s2,s2,s2,s2,s3,s5,RE

Macro programming examples (CS410)

Note that some of these examples only apply to macros used with specific elmeg PABX systems. The content of the macros may be different for other PABX systems.

Function	Macro command string
Access to the PABX's telephone directory SC range	RE,},,s3,1,7,7,7,7,2,2,2,4,4,ok
Show telephone book entry during an ongoing call (the LED lights up for 2 seconds)	f, f, s6, s2, s6, LZ
Activate »immediate« service-specific call forwarding (modular pabx systems for example) PIN »0000«, Module »0«, Connection »4«, Dial number index »5«, Service »02«, »N«:Destination of call forwarding, (key for level 1, activate LED)	B,*,*,0,0,0,0,7,1,0,4,5,0,2,N,#,LE,D
Delete »immediate« service-specific call forwarding (modular pabx systems for example) PIN »0000«, Module »0«, Connection »4«, Dial number index »5«, Service »02« (key for level 2, deactivate LED)	B,*,*,0,0,0,0,7,1,0,4,5,0,2,#,LA,D
Activate door terminal 1 / switching contact 1 (key for level 1, activate LED)	B,*,9,7,0,1,LE,D
Deactivate door terminal 1/ switching contact 1 (key for level 2, deactivate LED)	B,#,9,7,0,1,LA,D
Call mode »Day« für door terminal 1 /doorbell 1 (Key for level 1, activate LED)	B,*,9,6,1,,1,LE,D
Call mode »Night« for door terminal 1 / doorbell 1 (key for level 2, deactivate LED)	B,#,9,6,1,,1,LA,D
Actuate door terminal 1 / door opener (LED lights up for 2 seconds)	B,*,9,9,LZ,D
Hotel function: Check-in for room number »N« Key for level 1, activate LED	RE,},s3,7,N,ok,1,ok,LE
Hotel function: Check-out for room number »N« (key for level 2, deactivate LED)	RE,},s3,7,N,ok,2,ok,LA
Update LCR tariff tables »N«:6-digit PIN for the PABX system	RE,},s3,6,2,N,ok,ok
Enable the PABX for dial-in by the service center	B,*,7,8,2,D
Key programmed for a particular number (for example: 0190510110 and activate LED for two seconds)	RE,B,0,1,9,0,5,1,0,1,1,0,LZ
Program an appointment reminder	RE,f,s3,s5
Read new text messages (UUS1)	RE,},s6,s6,,s2
Write new text messages (UUS1)	RE,},s6,s6,s5

Function	Macro command string
Add an entry to the telephone directory	RE,f,s6,s2,s5
Activate or deactivate automatic headset use	RE,f,s3,}s1,IFLA,s5,ELSE,s2,RE
Activate or deactivate station guarding	RE,s5,IFLA,s5,ELSE,s2
Answering machine dictation key	RE,f,s4,s5,s6,s2
Listening to messages	RE,f,s4,s4
Forwarding of new messages combined with a voice announcement »N«: Number of the forwarding target, forwarding with 5 new messages	RE,f,s4,},s5,N,s2,s2,s2,s2,s2,s2,s5,s3,RE

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