



KAREL MS 26 C

KAREL MS 38 S

KAREL MS 38 ISDN

KAREL MS 48

KAREL MS 48 S

KAREL MS 48 ISDN

KAREL MS 128

KAREL MS 224

MS SERIES

TELEPHONE EXCHANGES

USER'S GUIDE

KAREL

MS SERIES TELEPHONE EXCHANGES

MS26C
MS38S
MS38-ISDN
MS48
MS48S
MS48-ISDN
MS128
MS224

USER'S GUIDE

JULY-2007

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KAREL may modify the content of this guide because of any improvement or addition without any notice. The products may have some differences from the functionality written in this guide according to the hardware revision or software version.

PREFACE

This guide covers all the facilities presented by MS26C and greater capacity MS Series system to you.

All Karel PABXs are enriched with many features to meet your daily communications needs.

All the features in this guide, can be used easily through any telephone set. Additionally, if you have a Karel Feature Phone (LT48 or FT10), can reach the user features just by one key touch.

We recommend you to read this guide thoroughly in order to be familiar all the features of your PABX.

We hope you will enjoy using your PABX,

KAREL ELECTRONICS

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SYSTEM FEATURES

DEFINITION:

MS Series telephone exchanges have ranges from 12 ports in total up to 224 ports, thanks to their modular and flexible structures. It essentially fulfills needs of small and medium-scale enterprises.

STRUCTURE OF SYSTEM:

The MS Series electronic telephone exchanges consist of software and hardware based electronic units. The configuration of the exchanges can be formed up to meet different capacities. Below, a list of the PABXs, which are handled within this guide, can be found:

MS26C, 2 lines and 6 extensions,

MS38S, 4 lines and 8 extensions,

MS38-ISDN, 2-4 lines and 8-12 extensions (max 14 ports),

MS48S, MS48 and MS48-ISDN, 4-12 lines and 12 – 40 extensions (max 48 ports),

MS128, 4-20 lines and 12 – 124 extensions (max 128 ports),

MS224, 4 – 28 lines and 12 – 200 extensions (max 224 ports).

It is possible to connect special peripheral units to the exchanges such feature phones as well as the standard telephone sets and devices as answering machines, wireless telephone sets, fax, data terminals and modems. The specific KAREL telephones (LT48, OP48, FT10) and Direct Station Select modules (DSS) (DSS40, DSS10) ease the use of many features of the exchanges, such that most of the features of the exchanges and some extra features can be accessed via a single key press. For such extra features please see the guide of the relevant unit.

DIAL TONES AND HOOK FLASH:

There is information below, about the factory default tones of the system and their structures.

Internal dial tone:

An extension receives this tone, which consists of a continuous signal at a single frequency when the handset is lifted. The tone indicates that one can dial numbers for any action.

CO dial tone:

An extension receives this tone upon accessing a line. An external number can be dialed after receiving the tone.

Ring back tone:

This tone is received when an extension calls another extension and if that extension is not busy at the moment. It is in the form of two short ringings.

For external calls, the ring back tone supplied by the CO is received.

Busy tone:

This is the tone in the form of short ringings, which indicates that the called extension or the external number is busy at the moment.

Special dial tone:

The special dial tone is heard continuously like the dial tone, but it is deeper. It indicates that the extension has already put another extension or a line on hold at the moment. One receives the special dial tone upon making hook flash during a conversation with an extension or line. The extension who has received this tone can go back to the conversation by making hook flash again or s/he can make use of services that are available upon receiving the special dial tone, such as information service. It is still possible to go back to the conversation by making hook flash again, after taking such actions.

Error tone:

This tone is in the form of three short tones and one long tone and it should not be confused with the busy tone. The tone indicates that an erroneous action has been taken by the extension.

Congestion tone:

MS26C, MS38S and MS38-ISDN systems do not support this tone.

If an extension has left the handset of the telephone off hook for longer than 1 minutes, this tone of high frequency and short cadence is received.

Hook flash:

This action is taken for putting the line, through which a conversation is taking place, on hold during the conversation. You need to press your phone's hook switch for a short while, for about 100-600 milliseconds (This duration can be changed through programming.) and then release it in order to make hook flash. The "Flash" or "R" keys on some phones can also be used for making hook flash. Moreover, some extensions with DTMF (tone dialing) phones can be given the authorization to make hook flash by pressing the "# " key, through programming.

DEFINITIONS

Extension (Internal line):

Owners of the phones that are connected to the exchange.

Extension number (Internal line number):

The inner-exchange phone number that must be dialed to call another phone, which is also connected to the same exchange. Extension numbers may vary with respect to the PABX type. Below a table showing the initial numbering plans of the PABXs is given.

Operator:

Owner of the first phone that is connected to the exchange. The operator can perform some special operations in addition to the entire operations that can be done by other extensions.

Hotel Room:

The extension who has been given authorization for some extra features, yet who has also been restricted for some other features, through programming.

External number:

The CO number that will be dialed after accessing the lines of the exchange whenever an outgoing call is to be made.

Line number:

The line number of the exchange to be dialed, if an extension wishes to employ a specific line for making an outgoing call.

ACD:

If the exchange has been equipped with the EVM card (2 or 4 channels), then ACD is the system that makes automatic call distribution (Auto attendant) in order to provide for the external callers faster access of the extensions.

* Numbering plan of the MS series PABXs as given in the following table may have extension numbers with 2 to 4 digits with respect the capacity whereas the line numbers are always have two digits.

MS26C	Extension numbers: 11 – 16, Line numbers: 01 – 02
MS38S	Extension numbers: 11 – 18, Line numbers: 01 – 04
MS38-ISDN	Extension numbers: 11 – 18 (22), Line numbers: 01 – 02 (04)
MS48S, MS48 & MS48-ISDN	Extension numbers: 11-22 (111-151), Line numbers: 01-04 (12)
MS128	Extension numbers: 111 – 234, Line numbers: 01- 20
MS224	Extension numbers: 1111 – 1310, Line numbers: 01 - 28

SERVICE EXPLANATIONS:

The services have been described both in symbolic pictures and in text that explains the actions to be done step by step, within this guide. As can be seen, the last steps of some services have been stated as "Listen to the internal dial tone". In that step, the extension who receives the internal dial tone can either hang up or can start using another service if s/he wishes.

The service may not work as desired, if one or more of the steps have been skipped or not completed, which are in the explanation list. In case the service does not work, even if the entire steps have been completely followed, then the source of the trouble can be searched by the help of the explanations in the "Notes" section. Please apply to your authorized reseller if a solution cannot be reached through the "Notes" section, either.

Moreover, considering the services ending with the statement: " **G** Replace the handset", if the extension possesses authorization to use the "*" key (apply to the System Supervisor for that authorization), s/he can realize the same operation by pressing the "*" key, instead of replacing the handset. Besides, the extension will directly receive the internal dial tone and will be able to make use of any other service s/he wishes.

Likewise, considering the cases when the extension needs to make " **A** Hook flash ", if the extension possesses authorization to use the "#" key (apply to the System Supervisor for that authorization), s/he can make hook flash by pressing the "#" key, instead of pressing the hook switch for a short while.

THE SERVICES RELATED TO USERS

In this chapter, features related to the usage of your MS Series Telephone Exchange have been explained. Please definitely read this section in order to utilize your exchange effectively.

The features below can be used by an extension with any standard phone set.

As can be seen in the following parts of the guide, several features have been presented in order to satisfy telecommunication needs of users easily. Most of those services can be exploited by dialing a related code through phone. In addition to that, Karel has developed several feature telephone sets (LT48, FT10, etc.) and DSS modules (DSS40, DSS10 etc.) in order to facilitate accessing such services. Users that take advantage of Karel feature telephone sets or DSS units can perform some additional operations that otherwise could not be performed through standard telephone sets, as well as they can utilize such services through pressing a single key or through the help of menu messages. Such features have been explained in the guides of the related telephone set or the DSS unit.

THE CALL INITIATION SERVICES

Internal Call:

In order to make an internal call:

- H** Lift the handset and hear the internal dial tone.
- B** Dial the number of the extension you want to call.
- F** Hear the ring back tone.
- E** Make the conversation when the extension answers.
- G** Terminate the conversation by replacing the handset when it is over.

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Notes:

- In the "Hear the ring back tone." step, in case you receive the busy tone, instead of the ring back tone, if you wait without hanging up, then you will receive the ring back tone as soon as the called extension hangs up. You will be able to make the conversation upon the extension answers.
- In the "Hear the ring back tone." step, in case you receive the busy tone, instead of the ring back tone, you can make use of the Call Back service by dialing 81, before hanging up. Whenever the called extension hangs up, your phone will ring. When you lift the handset, the other extension's phone will start to ring and the conversation will begin as soon as s/he answers.
- In the "Hear the ring back tone." step, if the called extension does not answer, while you are hearing the ring back tone, you can make use of the Call Back service by dialing 81, before hanging up. When the extension lifts and then replaces the handset for some reason later, your phone will ring. When you lift the handset, the other extension's phone will start to ring and the conversation will begin as soon as s/he answers.

Calling Operator:

In order to call the operator:

- H** Lift the handset and hear the internal dial tone.
- O** Dial 0.
- F** Hear the ring back tone.
- E** Make the conversation when the extension answers.
- G** Terminate the conversation by replacing the handset when it is over.

Notes:

- In the “Hear the ring back tone.” step, in case you receive the busy tone, instead of the ring back tone, if you wait without hanging up, then you will receive the ring back tone as soon as the operator hangs up. You will be able to make the conversation upon the extension answers.
- In the “Hear the ring back tone.” step, in case you receive the busy tone, instead of the ring back tone, you can make use of the Call Back service by dialing 81, before hanging up. Whenever the operator hangs up, your phone will ring. When you lift the handset, the operator’s phone will start to ring and the conversation will begin as soon as s/he answers.
- In the “Hear the ring back tone.” step, if the called extension does not answer, while you are hearing the ring back tone, you can make use of the Call Back service by dialing 81, before hanging up. When the extension lifts and then replaces the handset for some reason later, your phone will ring. When you lift the handset, the other extension’s phone will start to ring and the conversation will begin as soon as s/he answers.

Line Call (9):

When you use this feature of your exchange, it will assign the first available line to you, starting from the last one. By this way, you can reach any external number you wish by accessing an idle line.

In order to make a line call:

- H** Lift the handset and hear the internal dial tone.
- 9** Dial 9.
- F** Hear CO dial tone.
- B** Dial the external number you want to call.
- E** Make the conversation when the other party answers.
- G** Terminate the conversation by replacing the handset when it is over.

Notes:

- In the "Hear CO dial tone" step, if you receive the busy tone, you can make use of the Call Back service by dialing 81, before hanging up. Moreover, that line will be connected as soon as it is available, if you wait without hanging up.
- If you receive the error tone, either the line you are trying to access is out of service, or you do not have authorization to access that line.

Selective Line Access:

You can take advantage of this feature, if you want to make an external call through a specific line you will choose, instead of any available line that will be assigned by the exchange. For example: By this way, you can access a GSM gateway device that is connected to your exchange and maintain less costly GSM calls.

In order to make an external call over a specific line:

- | | |
|-----|----------------------------------------------------------------------|
| H | Lift the handset and hear the internal dial tone. |
| 7 B | Dial "7" and the number of the line you want to access. |
| F | Hear CO dial tone. |
| B | Dial the external number you want to call. |
| E | Make the conversation when the other party answers. |
| G | Terminate the conversation by replacing the handset when it is over. |

Notes:

- In the "Dial "7" and the number of the line you want to access." step, if you receive the busy tone, you can make use of the Call Back service by dialing 81, before hanging up. Moreover, that line will be connected to you as soon as it is available, if you wait without hanging up.
- If you receive the error tone, either the line you are trying to access is out of service, or you do not have authorization to access that line.

Marked Call (790):

You can mark some of your calls in call record listing by making use of this feature, so that later you can do several operations related to them. This feature is especially useful for distinguishing business and private calls from each other.

In order to mark the line call in call record listing:

H	Lift the handset and hear the internal dial tone.
7 9 0	Dial 790.
F	Hear CO dial tone.
B	Dial the external number.
E	Make the conversation when the other party answers.
G	Terminate the conversation by replacing the handset when it is over.

Notes:

- When a line is accessed by this way, the letter "M" appears in the call record listing, next to the related field of the extension who has made that conversation.

Account Coded Call (797):

You can group your external calls by defining certain account codes through this feature. Later on, you can do operations related to the records of those calls by the help of those codes. For example: Calls can be grouped based on occupations of the called persons such as lawyers, doctors etc.

In order to code the line call in the call record listing:

H	Lift the handset and hear the internal dial tone.
7 9 7	Dial 797.
B	Dial the account code (01..99).
F	Hear CO dial tone.
B	Dial the external number.
E	Make the conversation when the other party answers.
G	Terminate the conversation by replacing the handset when it is over.

Notes:

- When a line is accessed like this, "Ann" appears in the Net-CM call record listing, next to the related field of the extension who has made that conversation, where "nn" is the account code in the range 01-99. However, that information does not appear in the serial printer printouts.
- If the phone set through which that feature will be used is locked, then a password is requested after the account code.

Forced Account Coded Call (797):

MS26C, MS38S and MS38-ISDN PABXs do no support this service.

Thanks to this feature, you can make external calls through any phone set at other locations within your own authorization level using your own code and password that have previously been defined through programming, so that the conversation is marked in the call record listing and its cost is reduced from your pulse price account.

In order to make forced account coded line call:

- | | |
|-------|----------------------------------------------------------------------|
| H | Lift the handset and hear the internal dial tone. |
| 7 9 7 | Dial 797. |
| B | Dial the account code (01..99). |
| B | Dial the password defined for the account code (001..250). |
| F | Hear CO dial tone. |
| B | Dial the external number. |
| E | Make the conversation when the other party answers. |
| G | Terminate the conversation by replacing the handset when it is over. |

Notes:

- When a line is accessed like this, "Mnn" appears in the Net-CM call record listing, next to the related field of the extension who has made that conversation, where "nn" is the account code in the range 01-99.
- The telephone password is not requested if the telephone set that will be used for this feature has been locked (See "Telephone Locking").

Last Number Redial (60):

In order to call again the last external number you have called:

- F When you have received the busy tone or the error tone, just hang up and lift the handset, so that you will hear the internal dial tone.
- 6 0 Dial 60.
- C Wait for the exchange to call the number.
- E Make the conversation.

Private Pool Entry (84):

There are nine private memory fields on your exchange allocated for each extension.

In order to enter a number into the Private Pool:

- H Lift the handset and hear the internal dial tone.
- 8 4 Dial 84.
- B Dial the private pool memory number (1-9).
- B Dial the external number.
- G Replace the handset.

Notes:

- Each number that will be entered into the Private Pool can have at most 16 digits, except for the 9th pool as the 9th pool can have at most 9 digits.

Example: In order to enter the number 0212 2113426 into the third memory location, you have to dial 84302122113426.

- “#” Can be employed for the ACD applications in order to create one-second wait periods between the digits during number entry into the memory. More than one wait signs can be employed consecutively, when it is necessary. For example: 03123850240##117.

Calling from Private Pool (6):

In order to call through the Private Pool:

- H Lift the handset and hear the internal dial tone.
- 6 Dial 6.
- B Dial the private pool memory number you want to call (1-9).
- C Wait for the exchange to call the number automatically.
- E Make the conversation.

Calling from Common Pool (5):

Your exchange has 100 memory fields in the Common pool, which are available to all authorized extensions. You can have the numbers that you frequently call recorded by the Operator into the memory, so that you can call through the Common Pool.

In order to call through the Common Pool:

- H Lift the handset and hear the internal dial tone.
- 5 Dial 5.
- B Dial the common pool memory number you want to call (00-99).
- C Wait for the exchange to call the number automatically.
- E Make the conversation.

Notes:

- How to enter numbers into the Common Pool has been explained in the chapter "The Services Related to the Operator".

Last Number Auto-Dial (770):

In case a number you call is busy, the Automatic Redialing service make your exchange call the number automatically and continuously in certain intervals and then connect the line when the number becomes available and start to ring.

In order to activate the Auto-Dialer for the last number you have dialed:

- F Hear the dial tone or the special dial tone.
- 7 7 0 Dial 770.
- G Replace the handset.
- C Wait for the Auto-dialer to detect the availability of the number and connect the line.
- D Your phone will ring when the connection is established.
- H Lift the handset.
- E Make the conversation.

Deactivation:

- H Lift the handset and hear the internal dial tone.
- 7 7 Dial 77.
- G Replace the handset.

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Notes:

- The use of this service must be permitted by the System Supervisor through programming.
- The system waits for 15 seconds between two consecutive dials.
- If the system fails to connect the line after it has dialed the number for determined times (by default 15), then the call is cancelled.
- You are warned through ear by short beeps, if your phone is busy during the connection. In that case, you should either terminate your conversation as soon as possible, or park your current call and hang up. Then you can answer the recall connected by the Auto-dialer when your phone rings.

Private Pool Auto-Dial (77):

In case a number you call is busy, the Automatic Redialing service make your exchange call the number automatically and continuously in certain intervals and then connect the line when the number becomes available and start to ring.

In order to activate the Auto-Dialer for a number recorded in the Private Pool:

- H Lift the handset and hear the internal dial tone.
- 7 7 Dial 77.
- B Dial the private pool memory number (1-9).
- G Replace the handset.
- C Wait for the Auto-dialer to detect the availability of the number and connect the line.
- D Your phone will ring when the connection is established.
- H Lift the handset.
- E Make the conversation.

Deactivation:

- H Lift the handset and hear the internal dial tone.
- 7 7 Dial 77.
- G Replace the handset.

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Notes:

- The use of this service must be permitted by the System Supervisor through programming.
- The system waits for 15 seconds between two consecutive dials.
- If the system fails to connect the line after it has dialed the number for determined times (by default 15), then the call is cancelled.
- You are warned through ear by short beeps, if your phone is busy during the connection. In that case, you should either terminate your conversation as soon as possible, or park your current call and hang up. Then you can answer the recall connected by the Auto-dialer when your phone rings.

Common Pool Auto-Dial (78):

In case a number you call is busy, the Automatic Redialing service make your exchange call the number automatically and continuously in certain intervals and then connect the line when the number becomes available and start to ring.

In order to activate the Auto-Dialer for a number recorded in the Common Pool:

- H Lift the handset and hear the internal dial tone.
- 7 8 Dial 78.
- B Dial the common pool memory number you want to call (00-99).
- G Replace the handset.
- C Wait for the Auto-dialer to detect the availability of the number and connect the line.
- D Your phone will ring when the connection is established.
- H Lift the handset.
- E Make the conversation.

Deactivation:

- H Lift the handset and hear the internal dial tone.
- 7 8 Dial 78.
- G Replace the handset.

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Notes:

- The use of this service must be permitted by the System Supervisor through programming.
- The system waits for 15 seconds between two consecutive dials.
- If the system fails to connect the line after it has dialed the number for determined times (by default 15), then the call is cancelled.
- You are warned through ear by short beeps, if your phone is busy during the connection. In that case, you should either terminate your conversation as soon as possible, or park your current call and hang up. Then you can answer the recall connected by the Auto-dialer when your phone rings.

Hot Line:

Any extension may be programmed as hot line. The hot line can be used in three different ways:

- A pre-determined external number is called as soon as the telephone is picked up.
- CO dial tone is received either as soon as or 3 seconds after the telephone is picked up. Then an external number may be dialed.
- Another extension may be called either as soon as or 3 seconds after the telephone is picked up.

Paging An Extension (867):

An extension with a handsfree KAREL telephone can be paged.

In order to page an extension with handsfree KAREL telephone:

H Lift the handset and hear the internal dial tone.

8 6 7 Dial 867.

B Dial the number of the extension to page.

F Receive the short beep.

E Make your paging.

Paging A Group Of Extensions (865):

The extensions with handsfree KAREL telephones in a PBX group can be paged.

In order to page an extension with handsfree KAREL telephone:

H Lift the handset and hear the internal dial tone.

8 6 5 Dial 865.

B Dial the number of one of the extensions in the PBX group to page.

F Receive the short beep.

E Make your paging.

Paging All Extensions (866):

All extension with a handsfree KAREL telephones can be paged at a time.

In order to page an extension with handsfree KAREL telephone:

H Lift the handset and hear the internal dial tone.

8 6 6 Dial 866.

F Receive the short beep.

E Make your paging.

Doorphone Call:

The code of this service may vary with respect to the capacity and the type of the PABX used. Therefore, the differences in the explanations below must be noted.

In order to call the doorphone connected to the PABX:

MS26C, MS38S, MS38-ISDN, MS48S, MS48 and MS48-ISDN PABXs smaller than 24 ports:

H Lift the handset and hear the internal dial tone.

1 O Dial 10.

E Make your paging.

MS128, MS48S, MS48 and MS48-ISDN PABXs greater than 24 ports or when flexible numbering is active:

H Lift the handset and hear the internal dial tone.

1 1 O Dial 110.

E Make your paging.

MS224:

H Lift the handset and hear the internal dial tone.

1 1 1 O Dial 1110.

E Make your paging.

Notes:

- If you receive busy tone, then doorphone is used by another extension.
- The accessories DY01 and EVM38S cannot be connected to the MS26C, MS38S and MS38-ISDN exchange and used simultaneously.

Conference:

You can take advantage of this feature, if you wish to introduce another extension or line into the conversation while speaking to an extension or a line.

In order to include an extension into your conversation:

- | | |
|---|----------------------------------------------------------------------------------------------------------|
| A | Make hook flash. |
| F | Hear the special dial tone. |
| 5 | Dial 5. |
| B | Dial the number of the extension you want to introduce into the conference. |
| E | Notify the extension, which you have called, of your intension of including her/him into the conference. |
| A | Make hook flash. |
| E | Carry out the conference. |

In order to include a line into your external call:

A	Make hook flash.
F	Hear the special dial tone.
4	Dial 4.
9 / 7 b	Dial 9 or 7 and line number to access a line.
b	Dial the external number to include into conference
E	Notify the party, which you have called, of your intension of including her/him into the conference.
A 9	Make hook flash and dial 9.
E	Carry out the conference.

It is sufficient just to hang up, in order to end the conference.

Notes:

- You can retrieve the previous line by making hook flash again, if the extension you are calling is either busy or not answering.
- Operator should dial 3 instead of 4 to include one more line into a line call.

THE CALL ANSWERING SERVICES

Answering an Incoming Call:

In order to answer a call request received by your phone:

D Your phone rings in case of an incoming call.

H Lift the handset.

E Make the conversation.

External Call Pick Up (3):

In order to answer an external call ringing at another extension:

H Lift the handset and hear the internal dial tone.

3 Dial 3.

E Make the conversation.

Notes:

- If you receive the error tone, then that means there is not any incoming external call.
- Only extensions who are authorized by the System Supervisor, can use this service.

Selective Call Pick Up (82):

In order to answer a call ringing at another extension:

H Lift the handset and hear the internal dial tone.

8 2 Dial 82.

B Dial the number of the ringing extension.

E Make the conversation.

Notes:

- If you receive the error tone, then that means the telephone of the extension whose number you have dialed is not ringing.

Group Call Pick Up (5):

In order to pick up a call coming to an extension from your own group:

H Lift the handset and hear the internal dial tone.

5 Dial 5.

E Make the conversation.

THE OTHER CALL CONTROL SERVICES

Call Hold:

During an internal or a line call, the Call Hold is used for interrupting the conversation and putting that line on hold. There are several operations that may be done while a line is on hold and Call Hold is a preliminary step for those operations. The line drops if the extension hangs up while the line is on hold.

In order to put a call on hold:

- A Make hook flash.
- F Hear the special dial tone.

In order to retrieve a call that is on hold:

- A Make hook flash.
- E Continue with the conversation.

Notes:

- Operations that may be carried out in case of Call Hold:
 - Getting information,
 - Call transfer,
 - Call park,
 - Line flash,
 - Line –Line connection,
 - Serial transfer,
 - Conference.

Call Transfer:

During an internal or line call, you can transfer that line to another extension by notifying her/him or you can go back to your conversation after getting information from that extension.

In order to transfer a call by notifying the extension:

- A Make hook flash.
- F Hear the special dial tone.
- B Call the extension to whom you want to transfer the call.
- E Announce that you will transfer the call.
- G Replace the handset for the transfer.

In order to transfer the call without notification:

- A Make hook flash.
- F Hear the special dial tone.
- B Call the extension to whom you want to transfer the call.
- F Hear the ring back or the busy tone.
- G Replace the handset for the transfer.

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Notes:

- In case the extension you are calling is busy or not answering, you can go back to the line over which you were making a conversation by making hook flash or you can call another extension by making hook flash twice and then dialing the related number, or you can transfer the line to the extension who is busy or not answering, by simply replacing the handset.
- If the transferred line is not answered within 40 seconds, then it returns to the extension who has performed the transfer operation. The busy extension to whom a line is transferred will be warned by ear with a short beep. In that case, the extension is supposed to answer the transferred call after either terminating the current conversation as soon as possible or parking it. You need to make hook flash to go back to the line you were making a conversation, if you change your mind about transferring the call after you begin speaking to the extension you have called for getting information or transferring the call.
- If you take a wrong action and hang up during the transfer, then if it is an external line, it is parked and rings back after five seconds or the line drops if it is an extension.
- (For PABX software 3.11A or better, for FT10 users) During a line call, if the line is put on hold and an extension is called which is busy at that time, and if the line is then parked, as soon as the extension gets idle, on the LCD of FT10, the line number and the extension to be transferred appear. Transfer option is seen and the warning tone is emitted from the telephone. Also if the extension is programmed on one of the Speed Dialing Buttons of the telephone, then the relevant LED blinks red and orange with 0.5 sec cadence. The warning of the telephone goes on as far as the telephone stays on hook. This kind of warning can be handled up to four calls at a time.

Line Transfer to an Extension:

You can transfer a line to an extension while conversing with her/him in order to enable her/him to make line calls under your control.

In order to transfer a line:

Make hook flash while conversing to the extension.

f Receive special dial tone.

4 Dial 4 and receive dial tone.

9 / 7 b Dial 9 or 7 and line number

Make hook flash.

B Dial extension's number.

G Hang up.

Notes:

- If an extension with authority transfers an external line to an extension that does have external call authority, local calls can be made.

Line Call Park (#4):

In some cases, you may need to park the line over which you are making a conversation and do some other operation (such as answering a call request coming from another line, or getting information by calling through another line.)

In order to park a line conversation:

- A Make hook flash while talking over the line.

- F Wait for the special dial tone.

- 4 Dial 4.

- F Hear the internal dial tone.

Notes:

- The line gets into waiting state and your phone becomes completely free. If the parked calls are not retrieved within 60 seconds (this period can be adjusted by programming), then they automatically return to the extension who has parked them.
- One line call can be parked at a time.
- Operator should dial "3" instead of "4".

Retrieving a Call Parked Through One's Own Phone (4):

In order to retrieve a call you have parked:

H Lift the handset and hear the internal dial tone.

4 Dial 4.

E Make the conversation.

Notes:

- The line gets into waiting state and your phone becomes completely free. If the parked calls are not retrieved within 60 seconds (this period can be adjusted by programming), then they automatically return to the extension who has parked them.
- Operator should dial "3" instead of "4".

Retrieving a Call Parked Through Another Phone (44):

In order to retrieve a parked call:

H Lift the handset and hear the internal dial tone.

4 4 Dial 44.

B Dial the number of the extension who has parked the line or the parked line number.

E Make the conversation.

Notes:

- The line gets into waiting state and your phone becomes completely free. If the parked calls are not retrieved within 60 seconds (this period can be adjusted by programming), then they automatically return to the extension who has parked them.

Retrieving a Multiply Parked Line (4):

In order to retrieve a line that has been multiply parked by the operator:

- H Lift the handset and hear the internal dial tone.
- 4 Dial 4.
- B Dial the number of the line that has been parked.
- E Make the conversation.

Line-Line Connection (#6):

This service allows you to call another line after putting the current line on hold during a line conversation. This feature can be used for establishing line-line connection as well, if necessary; such that, you can connect the line on hold and the other line you are making conversation with.

In order to connect two lines together:

- # 4 Make hook flash and dial 4.
- 9 Dial 9 or
- 7 b 7 and the line number and then dial the external number.
- e Talk to the second party
- # 6 Make hook flash and dial 6.
- G Hang up.

Notes:

1. Operator must dial 3 instead of 4.
2. When two lines are connected to each other, duration of the conversation is 3 minutes. The two parties receive a warning tone after 3 minutes have elapsed before the call is terminated. Then any one of the parties having a DTMF telephone set, can extend the duration with 3 more minutes by pressing "9" from her/his own telephone. With this method the call duration can be expanded as much as required.

Line Flash (#9):

This service provides you with hook flash facility during a line call. It is useful for the cases described below:

- If CO supports some services that require hook flash action, for the cases when such services are exploited,
- If two exchanges have been connected to each other by extensions and lines, for the cases when hook flash action is required on the opposite exchange,
- If another line access is needed immediately after the termination of a line call.

In order to make hook flash during a line call:

E

During a line call:

A 9

Make hook flash and dial 9.

F

Hear the tone that will be transmitted over the line and go on with your action.

Call Back (81):

If the extension you call or the line you attempt to access is busy, or the extension does not answer, then you can make your exchange notify you of the availability of the line by making use of the Call Back feature.

In order to call back:

8 1

When you receive the busy tone or when the extension you call is ringing dial 81.

G

Replace the handset.

When the line gets idle or the extension who has not answered uses her/his telephone and hangs up for the first time after your call attempt, your phone rings and when you answer you automatically hear CO dial tone or the ring back tone of the extension you have called. You may then dial the external number or make the conversation when the extension answers.

Deactivation:

H

Lift the handset and hear the internal dial tone.

8 1

Dial 81.

F

Hear the internal dial tone.

Notes:

- You need to be authorized through programming in order to take advantage of the Call Back service.

Camp On:

You can wait without hanging up, if the extension you call or the line you attempt to access is busy. Whenever the extension or line is available, you hear CO dial tone or the ring back tone of the extension, accordingly. Then you may dial the line number with using the line selective service or make conversation when the extension answers.

Busy Extension Signalling (1):

If the extension you are calling is busy, you can transmit signals that will warn her/him by ear about your call request.

In order to warn a busy extension by ear:

1 Dial 1 while you are receiving the busy tone.

C Wait for the extension to hang up.

Notes:

- The extension will receive a short warning tone through her/his handset each time you dial 1.

Intrusion (0):

If the extension you are calling is busy, then you may intrude in the ongoing conversation.

For intrusion:

O Dial 0 when you receive the busy tone.

E Join the conversation.

The intrusion operation terminates when you hang up, conversation of the other parties continues.

Notes:

- If your authorization level is equal (The equality case applies only for the extensions with authorization level 7) or lower than that of the extension whose conversation you attempt to intrude in, then the intrusion operation does not take place and you go on receiving the busy tone.
- Following the intrusion operation, both parties receive a short beep and a triple conference starts.

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- If there is a line waiting in your queue while you are intruding, then you may replace the handset to transfer that line to the extension whose conversation you have intruded in, or you may make hook flash to retrieve the line without transferring. It is sufficient to hang up to exit the intruded conversation.
- On MS26C, MS38S and MS38-ISDN systems, when a call of an extension is intruded, the 3rd party can hear the conversation but cannot participate.

Intrusion In Conference (5):

If the extension you are calling is busy, then you may intrude in the ongoing conversation and start a conversation.

For intrusion:

5 Dial 5 when you receive the busy tone.

E Join the conversation to make a conference.

The intrusion operation terminates when you hang up, conversation of the other parties continues.

Notes:

- To use this service you must be authorized by the System Supervisor.
- Following the intrusion operation, both parties receive a short beep and a triple conference starts.
- If there is a line waiting in your queue while you are intruding, then you may replace the handset to transfer that line to the extension whose conversation you have intruded in, or you may make hook flash to retrieve the line without transferring. It is sufficient to hang up to exit the intruded conversation.
- Operator's call cannot be intruded with this service.

Line Voice Level Control (#55):

MS26C, MS38S and MS38-ISDN PABXs do not support this service.

In case you have difficulty with hearing the incoming voice from the line, over which you are making a conversation, the received voice level can be increased through this facility.

In order to increase the incoming voice level:

A Make hook flash.

5 5 Get into high-level status by dialing 55.

E Continue with the conversation.

In order to decrease the incoming voice level to normal level:

A Make hook flash.

5 5 Get into normal-level status by dialing 55.

E Continue with the conversation.

Notes:

- The voice level of the line reverts to the default values after your conversation is over.

THE CALL FORWARDING SERVICES

Follow Me (85):

You can make calls coming to your telephone ring at another extension, thanks to this feature.

In order to activate the Follow Me feature:

H

Lift the handset and hear the internal dial tone.

8 5

Dial 85.

B

Dial the number of the extension to which you want your calls to be forwarded.

F

Hear the internal dial tone.

Deactivation:

H

Lift the handset and hear the internal dial tone.

8 5

Dial 85.

G

Replace the handset.

Notes:

- Separate Follow Me extension numbers can be defined for day and night modes.
- Several telephones can be forwarded to the same extension.
- If extension A1 has been forwarded to A2 and extension A2 has been forwarded to extension A3, then extension A2 rings when extension A1 is called.

Remote Follow Me (855):

Thanks to this service, you can forward calls, which comes to your telephone, to your present location or to another extension, even though you are not in your place.

In order to forward calls remotely:

H

Lift the handset of any extension and hear the internal dial tone.

8 5 5

Dial 855.

B

Dial your extension number.

B

Dial the number of the extension to whom the calls will be forwarded.

F

Hear the internal dial tone.

Deactivation:

H

Lift the handset of any extension and hear the internal dial tone.

8 5 5

Dial 855.

B

Dial your extension number.

G

Replace the handset.

Follow Me No Answer (86):

You can make all calls coming to you ring on another extension in case they are not answered after three ringings.

In order to forward calls:

H Lift the handset and hear the internal dial tone.

8 6 Dial 86.

B Dial the number of the extension to whom you want your calls to be forwarded.

F Hear the internal dial tone.

Deactivation:

H Lift the handset and hear the internal dial tone.

8 6 Dial 86.

G Replace the handset.

Executive-Secretary Service (888):

When the Follow Me feature is activated, since the entire calls coming to you will pass through the extension to whom you have forwarded the calls, you will be defined as Executive and the related extension as Secretary. In such a case, the Secretary extension can activate and deactivate the forwarding through her/his own telephone.

In order to deactivate the forwarding:

H

Lift the handset and hear the internal dial tone.

8 8 9

Dial 889.

F

Hear the internal dial tone.

In order to reactivate the forwarding:

H

Lift the handset and hear the internal dial tone.

8 8 8

Dial 888.

F

Hear the internal dial tone.

Notes:

- A secretary can serve several executives. In that case, the executive telephones that are connected to the same secretary telephone can call each other directly.
- The secretary can call the executive telephone.
- In case there are several executive-secretary groups in the system, executives in different groups can be enabled by programming to call each other directly.
- If an executive extension calls another one with equal or lower Intrusion Authority level, then directly the telephone of the executive extension rings instead of the secretary telephone (supported for the systems with software version 3.08R or better).

THE PASSWORD SERVICES

Password Define(836):

You can lock your telephone by using your password in order to prevent unauthorized usage of your telephone for external calls when you are not at your place.

In order to define password:

H

Lift the handset and hear the internal dial tone.

8 3 6

Dial 836.

B

Dial the password (000-250).

F

Hear the internal dial tone.

In order to cancel password:

H

Lift the handset and hear the internal dial tone.

8 3 6

Dial 836.

B

Dial your password.

G

Replace the handset.

Changing Password (836):

In order to change password:

H

Lift the handset and hear the internal dial tone.

8 3 6

Dial 836.

B

Dial your password.

B

Dial your new password.

F

Hear the internal dial tone.

Telephone Lock (837):

When you access a line selectively by dialing 9 through a telephone that has been locked by a password, you will hear a short tone upon dialing a code for calls through the memory. You are supposed to dial your password after that tone in order to proceed. This application is towards security.

In order to lock a telephone:

H Lift the handset and hear the internal dial tone.

8 3 7 Dial 837.

B Dial your password.

1 Dial 1.

F Hear the internal dial tone.

In order to unlock:

H Lift the handset and hear the internal dial tone.

8 3 7 Dial 837.

B Dial your password.

O Dial 0.

F Hear the internal dial tone.

Notes:

- If the password is deleted or changed when the phone is locked, the phone becomes unlocked automatically.
- While changing or deleting his password, or locking / unlocking his telephone, if the extension dials wrong password 3 times in a row the telephone can not be used along 1 hour. After 1 hour the extension is allowed to enter his correct password
- While the telephone is locked, if an extension wants to make a line call, he/she is supposed to dial her/his password. At this point if the extension dials wrong password 3 times in a row the telephone can not be used along 1 hour. After 1 hour the extension is allowed to enter his correct password.

Password Dialing:

Through this facility, you can make line calls when your telephone is locked by a password.

In order to make line calls through a locked telephone:

H Lift the handset and hear the internal dial tone.

9 Dial 9.

F Hear the short beep.

B Dial your password.

F Hear CO dial tone.

B Dial the external number.

E Make the conversation.

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Notes:

- In "Hear CO dial tone." step, if you receive the busy tone, that means the entire lines are in use at that moment. In this case, you should hang up and try again later.
- The similar kind of usage applies also for the services below, while the telephone is locked. You are warned by a short beep at the point when you are supposed to dial your password. You can proceed normally after the short beep by dialing your password:
 - Selective line access,
 - Last number redial,
 - Calling from the Private Pool,
 - Calling from the Common Pool,
 - Last number automatic redial,
 - Automatic calling from the Private Pool,
 - Automatic calling from the Common Pool.

Password-Protected Line Access (799):

By taking advantage of this service, you can make line calls within your own authorization level, through any telephone.

In order to make calls within your authorization level through some other telephone:

H

Lift the handset of any unauthorized extension and hear the internal dial tone.

7 9 9

Dial 799.

B

Dial your own extension number.

B

Dial your password.

F

Hear CO dial tone.

B

Dial the external number you want to call.

E

Make the conversation.

Notes:

- You must have defined a password previously, in order to make use of this service.
- In "Hear CO dial tone." step, if you receive the busy tone, that means the entire lines are in use at that moment. In this case, you should hang up and try again later.
- The calls of this kind are indicated with the letter "P" in the call record listing.

Remote Line Access:

It is possible to make a call within your extension's authorization level by calling a line that has been marked as DISA from outside your company and by accessing another external line in your system.

In order to access a line through the DISA line:

- F Call the DISA line of your system and hear the DISA tone.
- 9 Dial 9.
- B Dial your extension number.
- B Dial your password.
- F Hear CO dial tone
- B Dial the external number you want to call.
- E Make the conversation.

Notes:

- When two lines are connected to each other, duration of the conversation is 3 minutes. The two parties receive a warning tone after the 3 minutes have elapsed before the call is terminated. Then any one of the parties having a DTMF telephone set, can extend the duration with 3 more minutes by pressing "9" from her/his own telephone. With this method the call duration can be expanded as much as required.
- A password must have been defined on your extension, in order to take advantage of this service.

OTHER USER SERVICES

Do Not Disturb (831):

If you want, you can make your telephone ring only once and then halt, instead of ringing until you answer, when it receives a call request.

In order to activate the Do Not Disturb service:

H

Lift the handset and hear the internal dial tone.

8 3 1

Dial 831.

F

Hear the internal dial tone.

Deactivation:

H

Lift the handset and hear the internal dial tone.

8 3 0

Dial 830.

F

Hear the internal dial tone.

Notes:

- Even though your telephone rings once and then halts, the party calling you still hears the ring back tone. In this case, you can make conversation by lifting the handset, if you decide to answer the call.
- For the PABXs with software version of 3.08R or better, Do Not Disturb service does not function if the calling extension has a higher Intrusion Authority level.
- If the call is received from the operator, Do No Disturb service functions in all cases if it has been activated.
- If this facility is activated from an LT or FT telephone, it functions for all cases.

Temporary Reminder Service (838):

You can employ your telephone as an alarm clock and make it warn you by ringing at a certain time.

In order to set the reminding time:

H Lift the handset and hear the internal dial tone.

8 3 8 Dial 838.

B Dial the hour (00-23) and then the minute (00-59) at which you want to be warned.

F Hear the internal dial tone.

In order to deactivate the service before the warning time:

H Lift the handset and hear the internal dial tone.

8 3 8 Dial 838.

G Replace the handset.

Notes:

- At the time of warning, the telephone rings with a special reminder ring cadence. If the extension is using LT48(-H) or FT10, the buzzer of the telephone rings.
- If the extension is using a standard telephone set or an OP48(-H), s/he receives a warning tone in the form of "ding-dong" after picking up the phone.
- When reminder call is answered, the system message related to reminder service is announced, if the system is equipped with EVM module.
- If the extension fails to answer the call, then it rings for two minutes for a standard telephone set or OP48(-H) user or until it is answered for an LT48(-H) or FT10 user.

- If the telephone has been off-hook for less than three seconds, while the reminder call is answered, then the call is not terminated and the telephone starts to ring again after one minute.

Permanent Reminder Service (8387):

You can employ your telephone as an alarm clock and make it warn you by ringing at a certain time, every day.

In order to set the reminding time:

H Lift the handset and hear the internal dial tone.

8 3 8 7 Dial 8387.

B Dial the hour (00-23) and then the minute (00-59) at which you want to be warned.

F Hear the internal dial tone.

In order to deactivate the service before the warning time:

H Lift the handset and hear the internal dial tone.

8 3 8 Dial 838.

G Replace the handset.

Notes:

- At the time of warning, the telephone rings with a special reminder ring cadence. If the extension is using LT48(-H) or FT10, the buzzer of the telephone rings.
- If the extension is using a standard telephone set or an OP48(-H), s/he receives a warning tone in the form of "ding-dong" after picking up the phone.
- When reminder call is answered, the system message related to reminder service is announced, if the system is equipped with EVM module.

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- If the extension fails to answer the call, then it rings for two minutes for a standard telephone set or OP48(-H) user or until it is answered for an LT48(-H) or FT10 user.
- If the telephone has been off-hook for less than three seconds, while the reminder call is answered, then the call is not terminated and the telephone starts to ring again after one minute.

Background Music (857):

You can listen to the music, which is being transmitted from an external music source that is connected to your system, through your LT48, OP48 or FT10 telephone sets with handsfree feature.

In order to listen to the music:

H

Lift the handset and hear the internal dial tone.

8 5 7

Dial 857.

After a while, your handsfree telephone will be automatically picked up, the dial tone will be interrupted and the music transmission will begin.

Cancellation:

H

Lift the handset and hear the internal dial tone.

8 5 7

Dial 857.

F

Hear the internal dial tone.

Notes:

- Incoming calls during the Background Music mode will be automatically connected to your telephone.
- The music transmission to your telephone pauses during the telephone conversation when you receive a call request and continues after the conversation.

Room Monitoring Service (858):

You can monitor the room in which your telephone is located, through the telephone of any extension, in case it is necessary.

In order to monitor room:

h

Lift the handset and hear the internal dial tone.

8 5 8 H

Dial 858 on your telephone and leave it off hook.

B

Dial the number of your telephone through another telephone.

F 9

Dial 9 after receiving the busy tone.

Deactivation:

G

Hang up the telephone in monitoring status.

Notes:

- The Room Monitoring service can be used as long as the telephone in monitoring status remains off hook.
- The operator telephone cannot be monitored.

Parallel Ringing (856):

If you have been included in a group through PBX Extension Group program, then you can make the calls coming to you ring simultaneously on the next five members of your group.

In order to activate parallel ringing:

H

Lift the handset and hear the internal dial tone.

8 5 6 1

Dial 8561.

F

Hear the internal dial tone.

In order to deactivate parallel ringing:

H

Lift the handset and hear the internal dial tone.

8 5 6 0

Dial 8560.

F

Hear the internal dial tone.

Notes:

- Maximum three telephones in your extension group begin ringing in parallel when your telephone receives an external call request. The first one to pick up the phone makes the conversation. Night Mode groups are considered when your system is in the Night Mode.

Headset User (742):

Thanks to this service, the extensions, which have very intense telephone traffic, can use headset instead of handsets. Such extensions can still exploit the entire features as they would through the handset. In case the headset user extensions receive silence, they receive dial tone at ring cadence from the headset or the handset if someone calls them. They can answer those calls by dialing 0 or by making hook flash. Similarly, in case silence is received, numbers can be dialed directly.

In order to activate the headset user extension service:

H Lift the handset and hear the internal dial tone.

7 4 2 Dial 742.

You will start to receive silence from the handset after a few seconds.

Deactivation:

7 4 2 Dial 742.

G Replace the handset.

Notes:

- Every time the phone is picked up, the extension receives the dial tone for two seconds and then shifts to silence mode. Numbers can be dialed directly in this mode.
- While the headset user mode is active, 857 (Background music) cannot be dialed.
- This service is available for the PABXs with software version 3.08H or better.

Pager Activation (741):

Thanks to pager, you have the chance to be notified of and pick the calls coming to your telephone, even if you are not at your place.

In order to activate the pager that has been assigned to you:

H Lift the handset and hear the internal dial tone.

7 4 1 Dial 741.

F Hear the internal dial tone.

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Deactivation:

H Lift the handset and hear the internal dial tone.

7 4 0 Dial 740.

F Hear the internal dial tone.

Notes:

- To have the pager operate synchronously with your telephone, the pager itself must be programmed correctly as defined in its own manual.
- The PABXs with software version of 3.08H or better supports this service.

Door Opener :

The specific relay circuitry can be used to control a door opener, if programmed accordingly.

The code of the service may vary with respect to the capacity and the type of the PABX. Therefore, the differences in the explanations below must be noted:

In order to activate the door openers:

MS128, MS224, MS48S, MS48 and MS48-ISDN if flexible numbering is active:

H Lift the handset and hear the internal dial tone.

1 0 0 Dial 100.

MS26C, MS38S, MS38-ISDN, MS48S, MS48 and MS48-ISDN systems smaller than 24 ports:

H Lift the handset and hear the internal dial tone.

2 9 Dial29.

MS48S, MS48 and MS48-ISDN systems greater than 24 ports:

H Lift the handset and hear the internal dial tone.

1 5 1 Dial 151.

In order to activate the door opener while speaking to doorphone:

E While conversing on the doorphone.

2 Dial 2.

E While conversing on the doorphone.

Notes:

- To open the door while speaking to the doorphone, the extension must be authorized with # and * keys / hook flash authority program.

Relay Control Through DISA Line (743):

With this feature, the relay on the main system or relays on RL04 Relay Control Device can be controlled through DISA line. You can operate the device, you can turn it off or you can instantly work it and turn it off again easily. You need to dial the tag number of the relay you want to put in use (in the range 0..8.)

In order to activate the relay through DISA:

- H Hear the internal dial tone through DISA
- 7 4 3 Dial 743
- B Dial your extension number
- B Dial your password
- Then dial the tag number of the relay that you want to put in use
- 0 for the relay on the system.
 - 1-4 is for the first RL04 unit
 - 5-8 is for the second RL04 unit
- 1 To operate the device dial 1 (Activation)
- 2 To turn off the device dial 2 (Deactivation)
- 3 To operate the device for a while and then to turn it off dial 3

Notes:

1. The line access authority level of the extension, whose password is used, must be bigger than "0".
2. When the P is defined as "3" in order to turn the device on and off for a time period in the range 0.1 – 9 seconds, that duration can be determined through the exchange by the program coded 8094.

THE SERVICES RELATED TO THE OPERATOR

The services below can be used by the Operator only.

Programming Mode Lock (837)

In order to lock the system so that nobody can put the system into the programming mode:

H

Lift the handset and hear the internal dial tone.

8 3 7

Dial 837.

B

Dial your password.

1

Dial 1.

F

Receive the internal dial tone.

In order to unlock the system:

H

Lift the handset and hear the internal dial tone.

8 3 7

Dial 837.

B

Dial your password.

O

Dial 0.

F

Receive the internal dial tone.

Serial Transfer (#0):

Thanks to this facility, you can make a line call you will transfer return to you after the extension, to whom the call is to be transferred, hangs up.

For serial transfer:

- A Make hook flash.

- F Hear the special dial tone.

- O Dial 0.

- B Dial the number of the extension to whom you want to transfer the line.

- G Replace the handset for the transfer.

Notes:

1. Prior to the serial transfer, it would be useful to notify the person you are talking that the call will return to you.

2. The line will return to you, after the extension to whom the call has been transferred terminates the call. The serially transferred line cannot be terminated by the extension to whom it has been transferred.

Multiple Call Park (#4):

Operator can park more than one call at a time unlike other extensions.

In order to multiply park an external call:

- A Make hook flash while the external call is going on.
- F Hear the special dial tone.
- 4 Dial 4.
- f Receive the internal dial tone.

Notes:

- The line gets into waiting state and your phone becomes completely free. If the parked calls are not retrieved within 60 seconds (this period can be adjusted by programming), then they automatically return to the extension who has parked them.

Multiply Parked Call Retrieve (4):

In order to retrieve a multiply parked external call with Time Selective Method:

h Lift the handset and receive the internal dial tone.

4 Dial 4.

f Go on conversing on the line.

In order to retrieve a multiply parked external call with Line Selective Method:

h Lift the handset and receive the internal dial tone.

4 Dial 4.

b Dial the number of the line.

f Go on conversing on the line.

Notes:

- System Supervisor defines the Multiply parked Call Retrieve method by programming.

Background Music Source (832):

The source of the background music can be selected among the external music source or internal melody generator.

In order to select the external music source:

H Lift the handset and hear the internal dial tone.

8 3 2 1 Dial 8321.

F Hear the internal dial tone.

In order to select the internal melody generator:

H Lift the handset and hear the internal dial tone.

8 3 2 2 Dial 8322.

F Hear the internal dial tone.

In order to disable the background music:

H Lift the handset and hear the internal dial tone.

8 3 2 0 Dial 8320.

F Hear the internal dial tone.

Date Setting (833):

In order to set the system date:

H Lift the handset and hear the internal dial tone.

8 3 3 Dial 833.

B Dial the day (01-31), the month (01-12) and the year (00-99), respectively.

F Hear the internal dial tone.

Time Setting (88):

In order to set the system time:

H Lift the handset and hear the internal dial tone.

8 8 Dial 88.

B Dial the hour (00-23) and then the minute (00-59).

F Hear the internal dial tone.

Notes:

- When the time is set, relevant information is sent to the CLR device.

Common Pool Entry (834):

The Common Pool is a memory field with 100 locations to record telephone numbers, which is available for the utilization of all authorized extensions.

In order to enter a number into the Common Pool:

H Lift the handset and hear the internal dial tone.

8 3 4 Dial 834.

B Dial the common pool memory number (00-99).

B Dial the external number (at most 16 digits).

G Replace the handset.

Notes:

- Example: In order to enter the number 0 212 2113426 into the memory location 23, dial 834 23 0 212 2113426 and then replace the handset.
- “#” can be employed for the ACD applications in order to create one-second wait periods between the digits during number entry into the memory. More than one wait signs can be employed consecutively, when it is necessary. For example: 03123850240##117.

Parallel Operators (856):

The parallel operators defined by programming can be enabled to ring in parallel for the external calls coming to the operator or disabled.

In order to enable the parallel operators:

H Lift the handset and hear the internal dial tone.

8 5 6 1 Dial 8561.

F Hear the internal dial tone.

In order to disable the parallel operators:

H Lift the handset and hear the internal dial tone.

8 5 6 0 Dial 8560.

F Hear the internal dial tone.

Notes:

- When Parallel Operators are enabled, "Pa" LEDs on the Busy Display Panels of Karel Consoles or DSS modules of the operator and the parallel operators turn on.
- Extensions which are defined as Parallel Operators can only answer the calls of the operator but cannot use any other operator service.
- When the operator receives an incoming external call, then the telephones of all the parallel operators ring also. The first who picks up the handset, answers the call.

Night Mode (879):

Your exchange has been enriched in order to enable adjustment of the system in two different service modes, in case one needs to utilize certain features differently. The exchange may be adjusted to operate differently in those two modes, namely the Day Mode and the Night Mode.

In order to start the Night Mode:

H Lift the handset and hear the internal dial tone.

8 7 9 Dial 879.

F Hear the internal dial tone.

In order to start the Day Mode:

H Lift the handset and hear the internal dial tone.

8 7 8 Dial 878.

F Hear the internal dial tone.

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Notes:

- If you wish to determine the line access authorization levels, extension groups, call forwardings and the extensions on which the lines will ring, all of which will be valid only in Night Mode:
 - a. Line access authorization levels:
 - Put the system into the Night mode, as explained above.
 - Determine the line access authorization levels of the extensions (This can be done through programming features.)
 - b. Extension PBX group:
 - Put the system into the Night mode, as explained above.
 - Determine the extension groups (extension PBX group.) (This can be done through programming features.)
 - c. Follow Me:
 - Put the system into the Night mode, as explained above.
 - Do the operations that were explained in the Follow Me section, for the extensions you want.
 - d. Determining the extension on which the line will ring:
 - Put the system into the Night mode, as explained above.
 - Determine the extension numbers on which you want the lines to ring. (This can be done through programming features.)
- It is sufficient to do those operations once, unless modifications are needed. The Day parameters will be valid when the system exits the Night Mode.

Wake-Up Service (8388):

You can enter wake-up time into the telephone of any extension.

In order to activate wake-up:

H Lift the handset and hear the internal dial tone.

8 3 8 8 Dial 8388.

B Dial the number of the extension.

B Dial the hour (00.23) and the minute (00..59) for the warning.

F Hear the internal dial tone.

In order to deactivate the service before the time of warning:

H Lift the handset and hear the internal dial tone.

8 3 8 8 Dial 8388.

B Dial the number of the extension.

G Replace the handset.

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Notes:

- At the time of warning, the telephone rings with a special reminder ring cadence. If the extension is using LT48(-H) or FT10, the buzzer of the telephone rings.
- If the extension is using a standard telephone set or an OP48(-H), s/he receives a warning tone in the form of "ding-dong" after picking up the phone.
- When reminder call is answered, the system message related to reminder service is announced, if the system is equipped with EVM module.
- If the extension fails to answer the call, then it rings for two minutes for a standard telephone set or OP48(-H) user or until it is answered for an LT48(-H) or FT10 user.
- If the telephone has been off-hook for less than three seconds, while the reminder call is answered, then the call is not terminated and the telephone starts to ring again after one minute.

External Call Diversion (835):

When the system is in night mode, calls coming through a specific line can be forwarded to any external number.

In order to forward the calls:

H Lift the handset and hear the internal dial tone.

8 3 5 Dial 835.

B Dial line number.

b Dial the external number (max 14 digits).

* Dial * if the number has less than 14 digits.

F Hear the internal dial tone.

In order to disable the forwarding:

H Lift the handset and hear the internal dial tone.

8 3 5 Dial 835.

B Dial the line number

g Hang up the phone.

Notes:

- External call diversion functions only when the system is in the night mode.
- “#” key can be used to insert a pause of 1 sec. while the external number is being entered.

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- When two lines are connected to each other, duration of the conversation is 3 minutes. The two parties receive a warning tone after the 3 minutes have elapsed before the call is terminated. Then any one of the parties having a DTMF telephone set, can extend the duration with 3 more minutes by pressing "9" from her/his own telephone. With this method the call duration can be expanded as much as required.
- For example: If you would like to forward all the calls coming through line 02 to the external number 4670240, then you have to enter 835 02 4670240*. So, in night mode all the calls coming through line 02 is automatically forwarded to 4670240.

System Error Query (739):

In order to query the error state when the Er LED is on the Busy Display Panels of Karel Consoles or DSS Modules:

H

Lift the handset and hear the internal dial tone.

7 3 9

Dial 739 and see the system capacity on the display of the Karel phone.

O

Dial 0 to see the error code.

O

Dial 0 to see the next error code if any other error exists or the system capacity if there is no other error code.

O

Dial 0 to see the next error code if any other error exists or the system capacity if there is no other error code.

O

Dial 0 to see the next error code if any other error exists or the system capacity if there is no other error code.

g

Hang up the phone.

Error codes and their meanings:

Error code	Erroneous State
Er 00	All line are out of service
Er nn	The operational DTMF receiver number For MS26C, MS38S and MS38-ISDN nn can be : 01 or 02 For MS48S, MS48 and MS48-ISDN nn can be : 01 .. 05 For MS128 and MS224 nn can be 01 ..11
Er A	Extension "A" has left the telephone off hook for more than 1 minute.

Notes:

- In case "Er A" is seen as the error code, then you can contact the extension to hang up her/his telephone.
- In case "Er 00" or "Er nn" is seen, contact your system supervisor.

Restoring the System Parameters (744):

If unexpected changes are observed with the operation of the exchange, and if those are not related to hardware problems, then the system parameters can be updated and the exchange recovers its normal operation state through this feature.

In order to restore the system parameters:

H

Lift the handset and hear the internal dial tone.

7 4 4

Dial 744.

G C

Replace the handset and wait for about one minute for the system to reload its entire parameters.

Notes:

- The entire system parameters are stored in a non-volatile memory. The system loads those parameters each time it starts.

THE SERVICES RELATED TO HOTEL ROOMS

MS26C, MS38S and MS38-ISDN PABXs do not support these services.

Some of these services can be utilized by the operator, whereas the others can be utilized by hotel room extensions. The information of who will utilize the service has been presented in the explanation section of the related service.

Hotel Room Cleanness Status Notification (730):

You can inform the operator of the cleanness status of rooms through the telephones in those rooms.

In order to set the cleanness status of a room:

H	Pick up the telephone of the hotel room extension whose status you will inform of and hear the internal dial tone.
7 3 0	Dial 730.
B	Dial the code indicating the status.
G	Replace the handset.

The code related to the status of the room is below.

- If the room is clean, then 0,
- If the room is being cleaned, then 1,
- If the room is dirty, then 2,

Notes:

- As the result of this operation, the printout of the related information is taken from the serial printer.

Changing Hotel Room Usage Status (730):

You can change the usage states of rooms through the operator telephone.

In order to change the usage status of a room:

- H** Lift the handset and hear the internal dial tone.
- 7 3 0** Dial 730.
- B** Dial the number of the hotel room extension whose status will be changed.
- B** Dial the code indicating the status.
- G** Replace the handset.

Status of the room and the related code are below.

- If the room is vacant, then 0,
- If the room is full, then 1,
- If the room is reserved, then 2,
- If the room is out of service, then 3.

Notes:

- As the result of this operation, the printout of the related information is taken from the serial printer.

Hotel Room Query (731):

By the assistance of the operator or the system supervisor, you can query the values that have been entered through the 730-hotel room status notification service, when necessary.

In order to query the room status:

H Lift the handset and hear the internal dial tone.

7 3 1 Dial 7311.

B Dial the number of the hotel room extension whose status will be queried.

The hotel room state is seen on the display of the Karel telephone then if desired:

2 Dial 2 to send the state info to serial printer and the next hotel room number is displayed.

2 Dial 2 to see the state of this hotel room.

This can be repeated to check the state of the all hotel rooms, or

1 Dial 1 to display the next hotel room number.

1 Dial 1 to see the state of this hotel room.

This can be repeated to check the state of the all hotel rooms, or

9 Dial 9 to send the states of all hotel rooms to serial printer at once.

G Hang up.

Check-in/Check-out (732):

Through the operator telephone, a hotel room extension can be fully authorized to make calls by day and night, her/his pricing and call record information can be reset (Check-in).

For Check-in:

H Lift the handset and hear the dial tone.

7 3 2 Dial 732.

B Dial the hotel room extension number.

1 Dial 1.

F Hear the internal dial tone.

For check-out:

H Lift the handset and hear the internal dial tone.

7 3 2 Dial 732.

B Dial the hotel room extension number.

O Dial 0.

F Hear the internal dial tone.

Notes:

- To be able to make check-in for a room, the room must be set as vacant and clean.

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- When the Check-out service has been used, the entire calling authorization of the related hotel room extension is reset. The total price record is taken from a printer or PC. A detailed record can be taken by the code 8766 upon wish.

Meet Me Service (738):

The personnel who keep on changing place within a hotel can notify the operator of their locations.

In order to notify of location:

- | | |
|-------|------------------------------------------------------------------------------------------------------------|
| H | Lift the handset of the telephone of the extension of the room you are in and hear the internal dial tone. |
| 7 3 8 | Dial 738. |
| B | Dial the personnel number that has been assigned to you (0..9). |
| G | Replace the handset. |

In order to call one of the personnel who has notified of her/his location:

- | | |
|-------|------------------------------------------------------------------|
| H | Lift the handset and hear the internal dial tone. |
| 7 3 8 | Dial 738. |
| B | Dial the number of the personnel member you want to call (0..9). |
| E | Make the conversation. |

Notes:

Only an extension who has the authorization to call the operator or a hotel room, but who has not been marked as hotel room extension can call the hotel room, where one of the personnel who has notified of her/his location, is in.

THE SERVICES RELATED TO REPORTING

These services, except the Night Guard Code, can be used only by the operator:

Call Record Listing of a Specific Port (8766):

Detailed listing of the calls made by a specific extension or through a specific line can be taken again from the Net-CM or a printer.

In order to take the call record listing related to a specific port again:

H Lift the handset and hear the internal dial tone.

8 7 6 6 Dial 8766.

B Dial the number of the extension or line.

F Hear the internal dial tone.

The system will list the call record data related to the extension or line that is in the memory, from the call record device.

Notes:

- The line number must be entered with a preceding 0 for MS48 and MS48-ISDN systems if the capacity is bigger than 24 ports.
- If you wish to terminate the listing process at a point, then you can stop it by dialing 8768.

Call Record Listing (8767):

Detailed listing of the external calls can be taken again from the Net-CM or a printer.

In order to take the call record listing again:

H Lift the handset and hear the internal dial tone.

8 7 6 7 Dial 8767.

F Hear the internal dial tone.

In order to stop the call record listing:

H Lift the handset and hear the internal dial tone.

8 7 6 8 Dial 8768.

F Hear the internal dial tone.

Total Cost Listing (8764):

In order to take the total cost listing printout related to an extension from a printer:

H

Lift the handset and hear the internal dial tone.

8 7 6 4

Dial 8764.

B

Dial the number of the extension whose total cost listing will be taken.

F

Hear the internal dial tone.

Notes:

- The numbers of the metering pulses that the extensions have used during their external calls are preserved in a separate register. Hence, even when some of the call records are cleared from the system memory, the metering pulse numbers are not lost. Thus, when this feature is used, the pulse info covers the erased calls as well.
- The cost that appears in the output of this code is calculated by multiplying the cost of line 01 by the number of total metering pulses of that extension.

Deleting a Record from the Call Record Listing (8765):

In order to delete records related to a specific extension or line from the Call Record memory:

H Lift the handset and hear the internal dial tone.

8 7 6 5 Dial 8765.

B Dial the number of the extension or line whose call records you will delete.

F Hear the internal dial tone.

Notes:

- The line number must be entered with a preceding 0 for MS48 and MS48-ISDN systems if the capacity is bigger than 24 ports.

Common Pool Listing (746 / 826):

In order to list the content of the Common Pool to the serial printer:

H Lift the handset and hear the internal dial tone.

8 2 6 / 7 4 6 Dial 826 or 746.

C The common pool numbers are printed out.

F Hear the internal dial tone.

Parameter Listing (839):

In order to list the basic parameters of an extension or a line:

H	Lift the handset and hear the internal dial tone.
8 3 9	Dial 839.
b	Dial the extension or 0 + line number to see the parameters.
C	The parameters are printed out.
F	Hear the internal dial tone.

Notes:

- If the operator dials 839 9, then starting from the first extension, the parameters of all the extensions and lines are printed out, at once.

Night Guard Code (869):

In order to send information to call record device from a specific location at a specific time:

H	Lift the handset of the telephone at your location and hear the internal dial tone.
8 6 9	Dial 869.
G	Replace the handset.

KY16 Page Feed (8763):

MS224 PABX does not support this service.

To feed one page on KY16 Mini Printer:

H

Lift the handset and hear the internal dial tone.

8 7 6 3

Dial 8763.

g

Hang up.

KY16 Line Feed (8762):

MS224 PABX does not support this service.

To feed one line on KY16 Mini Printer:

H

Lift the handset and hear the internal dial tone.

8 7 6 2

Dial 8762.

g

Hang up.

KY16 Off-Line (8760):

MS224 PABX does not support this service.

KY16 Mini Printer can be set off-line so that no print outs are taken.

To set the KY16 off-line::

H

Lift the handset and hear the internal dial tone.

8 7 6 0

Dial 8760.

g

Hang up.

KY16 On-Line (8761):

MS224 PABX does not support this service.

KY16 Mini Printer can be set on-line so that the call records are printed out automatically.

To set the KY16 on-line::

H

Lift the handset and hear the internal dial tone.

8 7 6 1

Dial 8761.

g

Hang up.

EXAMPLES OF TAKEN REPORTS

Call Record Listing Examples:

#0000 IC

08/12/01 14:32:07 14:32:25 00:18 111 112 04

#0001 LOC

08/12/01 14:34:17 14:34:38 00:21 113 113 13 00000 0 4483219

Explanation:

The first line:

The counter (for instance: #0001),

The call type

I: Internal call

LOC: Local call

LDIS: Long distance call

INT: International call

IC: Incoming external call

U: Unanswered incoming external call

The second line:

Date,

Starting time,

Ending time,

Call duration,

Number of the extension who has started (4 digits),

Number of the extension who has ended (4 digits),

Number of the line that has been used (2 digits),

Quantity of the pulse prices that have been detected,

Cost (6 digits),

Dialed external number.

Summary Information Example:

(Listed as the result of total cost query)

08/12/2001 16:35

112 0010 0000100

Explanation:

The date of the total cost query,

The time of the total cost query,

The number of the extension for whom the total cost query is performed,

The total metering pulse.

The total cost.

Night Guard Code Example:

NIGHTGUARD CODE 116 08/12/01 15:38:42

Explanation:

The extension number through which the night guard code has been dialed (8 digits),

The date at the moment when the code was dialed,

The time at the moment when the code was dialed.

Common Pool Listing Example:

00 02122562349

Explanation:

The common pool register number .

The external number.

Extension Parameter Listing Example:

SUBS	118
FOLL	115
PABX	112
NFOLL	113
NPABX	112
PERM	03
NPERM	01
PRIO	05
GROUP	01
TDUR	06

Explanation:

Queried extension number.

Follow Me extension for day mode.

The next extension in the PBX group for day mode.

Follow Me extension for night mode.

The next extension in the PBX group for night mode.

External Call Authority for day mode.

External Call Authority for night mode.

Intrusion Authority.

Line Access Group number.

Outgoing Call Time-out duration.

Line Parameter Listing Example:

TURNK 118
FOLL 115
PABX 112
NFOLL 113
NPABX 112

IS ON SERVICE/OUT OF SERVICE

DIALING DP / MF

ACD / DID

GROUP 01

Explanation:

Queried line number.

Ringing extension for day mode.

The next line in the PBX group for day mode.

Ringing extension for night mode.

The next line in the PBX group for night mode.

Service state.

Signalling state.

DISA / ACD selection.

Line Access Group matching.

Outgoing Call Time-out duration.

Reminder or Wake-Up Message Examples:

#G 114 08/12/01 15:49:15 07:30:00

Explanation:

#G: The information of that the reminder (wake-up) has been activated,
The date when the reminder (wake-up) was activated,
The time when the reminder (wake-up) was activated,
The time when the reminder (wake-up) will be on line.

#A 111 09/12/01 07:31:23

Explanation:

#A: The information of that the reminder (wake-up) has been accomplished,
The date when the reminder (wake-up) was accomplished,
The time when the reminder (wake-up) was accomplished.

#I 111 08/12/01 15:49:48

Explanation:

#I: The information of that the reminder (wake-up) has been deactivated,
The date when the reminder (wake-up) was deactivated,
The time when the reminder (wake-up) was deactivated.

#f 114 09/12/01 07:34:00

Explanation:

#f: The information of that the reminder (wake-up) has been unsuccessful,
The date when the reminder (wake-up) was unsuccessful,
The time when the reminder (wake-up) was unsuccessful.

Hotel Room Query Message Examples:

#O 00 112 08/12/01 16:16:19

Explanation:

#O :The hotel room query message information,
The status information reported as the result of the query (00.11),
Number of the queried hotel room extension,
The date of the query,
The time of the query.

Message Example In Case Of Check-In:

#T 08/12/01 16:27:57 112 CHARGE INFO CLEARED

Explanation:

#T: The information of that the check-in has taken place,
The date of the check-in,
The time of the check-in,
The extension number of the room that was checked-in,
"The price information has been reset" information.

Message Example In Case Of Check-Out:

#T OUT 08/12/01 16:28:11

112 0010 0000100

Explanation:

#T: The information of that the check-out has taken place,
The date of the check-out,
The time of the check-out,
The extension number of the room that was checked-out,
The metering pulse info
The price information.

