



KAREL E15

4 LINE DISPLAY FEATURE TELEPHONE SET

TECHNICAL REFERENCE AND USER GUIDE



**4 LINE DISPLAY FEATURE
TELEPHONE SET**

**TECHNICAL
REFERENCE
AND
USER GUIDE**

MAY 2010

KAREL

KAREL
ELEKTRONİK
SANAYİ ve
TİCARET A.Ş.

ARGE MERKEZİ
Cyberplaza B Blok Kat 3
Bilkent 06800 Ankara
Tel: +90.312.265.02.90
Faks: +90.312.265.02.97

DECLARATION OF CONFORMITY

R&TTE-Directive : 1999/5/EC

Hereby, we:

Karel Electronics Corporation,

addressed : Organize Sanayi Bölgesi, Gazneliler Caddesi No:10 06935 Ankara,
TURKEY

declare on our own responsibility, that the product:

Handsfree Feature Phone,

FT15

is in compliance with the provision of R&TTE directive 99/5/EC with
requirements covering EN 55024 & EN 55022 Class B of EMC directive
89/336/EEC and EN 60950 of Low Voltage directive 73/23/EEC.

ANKARA / TURKEY
25.02.2009

Yaman Tunaoğlu





Version Table	
Software Version	Date/Version of Guide
AAA	AAA / 12.06.2009
AAG	AAB / 03.05.2010

FT15 TTKK- Ver. AAB- 03.05.2010

KAREL reserves the right to make modifications in product features mentioned in this document for development and improvement purposes, without prior notice. Individual products may possess characteristics different from those that have been mentioned in this document, due to their differences in software and hardware versions.



ISSUES TO PAY ATTENTION TO

- Read this guide carefully before you use your device and keep it for later reference.
- Any mistake with the connections in your device may damage it or your exchange. Especially the connection to the exchange must be made by the Authorized Technical Services. The explanations about connections in the User's Guide have been intended to give information only.
- A connection box comes with your device. The connections must be made as described in the installation chapter.
- In case you need a connection of plug-outlet type, never apply electric plugs and outlets; use plugs, outlets and connection components that are specific to telephones.
- Do not make any connection other than the extension connection of the KAREL telephone system.
- There is no part that you can repair or maintain in your device; therefore call the authorized technical service in case of any malfunction.
- Keep your device away from direct sunlight.
- Do not let any liquid substance spill on your device.
- Do the exterior cleaning of your device with a slightly moistened piece of cloth.
- Do not apply any chemicals for cleaning.
- Please call your authorized dealer in case you would like to change the place of your device. Use its own packing to carry the device.
- Any external signal used to make tests on the phone, may damage the phone. Do not use any external signal.

PREFACE

Chapters in this guide have been prepared in order to present detailed technical information to people who need technical-introduction-based information about the FT15 4 Line Display Feature Phones, in addition to giving technical information about programming and use of those telephones. By this way, one could understand abilities of the FT15 4 Line Display Feature Phones, how it will be operated in accordance with customer demands and things that should be done in order to operate them with full performance.

The first chapter - "Technical Introduction" – It contains technical information about the hardware and software structures of the FT15 Feature Phone. Information in this chapter, for which knowledge in mechanics, electricity and electronics may be prerequisite, aims to introduce structure of the phone.

The second chapter – "Installation" – The methods to be followed for the installation of the FT15 Feature Phone are explained. This chapter must be read definitely before the installation by the personnel who will perform the installation.

The last chapter – "Program Features" – This chapter gives detailed information about the software features that will enrich functions of the FT15 Feature Phone and that could be applied to meet daily communication needs of customers more comprehensively.

Best Regards,

KAREL

CONTENTS

TECHNICAL INTRODUCTION	1
INTRODUCTION	1
COMPATIBILITY	1
PARTS LIST ON DELIVERY	1
GENERAL APPEARANCE	2
TECHNICAL SPECIFICATIONS	2
USER INTERFACE	3
INCOMING CALL LED	3
DISPLAY	3
MULTI PURPOSE SOFT MENU KEYS	3
NAVIGATION KEYS AND SPECIAL FUNCTION KEYS	4
NUMERICAL KEY PAD	5
VOICE CONTROL KEYS	6
PROGRAMMABLE SPEED DIAL KEYS	7
FUNCTION PROGRAMMING FOR THE SPEED DIAL KEYS	7
By the Function Programming Menu	7
Code Programming	9
By the Private Pool Programming Menu:	9
By Automatic Programming Menu:	9
INSTALLATION	10
CONNECTION POINTS	10
FT15 INSTALLATION	11
Required Hardware For The Connection:	11
Connecting FT15 To The Exchange:	12
Defining Extension Number for FT15	13
Number of FT15s That Can Be Connected to the Exchange and Connection Distances	14
FT15 Usage on Table with Angle Adjustment or On Wall	14
FT15 Start-up State	16
PROGRAM FEATURES	17
PROGRAMMING MENUS	17
CALL OPTIONS	18
Call Diversion	18
Auto Dial	18
Paging	19
Missed Calls	19
Answered	19
Dialed	19
PHONE SETTINGS	20
Key Settings	21
Extension	22
Line	22
Private Pool	23

Common Pool	24
Feature.....	24
Auto Settings.....	25
Do Not Disturb.....	26
Background Music.....	26
Reminder.....	27
EPROM Version.....	27
Lazy Mode.....	27
Language	27
Headphone.....	27
Signal Beep Option	28
Line Access Code	28
Return Factory Set.....	29
Backlight.....	29
PHONE SECURITY.....	30
Password	30
Phone Lock	30
Phone Unlock.....	30
MESSAGE	31
Absent Message	31
Message Listen	31
PHONE BOOK.....	32
Find	32
Add.....	33
Change.....	33
Delete	34
SYSTEM SETTINGS.....	35
Setting Time	35
Setting Date	35
Night Mode.....	35
Common Pool Entry.....	36
ACD.....	36
Parallel Operator	36
APPENDIX.....	37
Error Messages.....	37

TECHNICAL INTRODUCTION

INTRODUCTION

FT15 is a telephone set, which can be used with all MS series exchanges of KAREL, and that provides ease and rapidity to the usage of those systems.

NOTE: FT15 is not compatible with the MS26S exchange, as an exception.

By the FT15 telephone sets:

- Users are provided with the facility of performing several operations such as calling back, auto dialing, follow me, conferencing and alarm setting, by pressing a single key through special-purpose keys and the display that are on the telephone, without the necessity to know the system-specific special codes.
- Active services and call information, as well as the actions that the user can take for them, are displayed through the four-line LCD (liquid crystal).
- Actions that can be taken for the active services and the call information, which are indicated on the LCD display, are carried out easily and rapidly through four keys with special functions that are located below the display.
- One-touch extension and/or line calls can be made over the phone book and programmable keys. (This facility is valid or MS Series software with the version ACA or better.)
- Statuses of the extensions and/or lines that have been assigned to those keys can be viewed through the lights (LED) in two colors, which are embedded into the programmable keys.

COMPATIBILITY

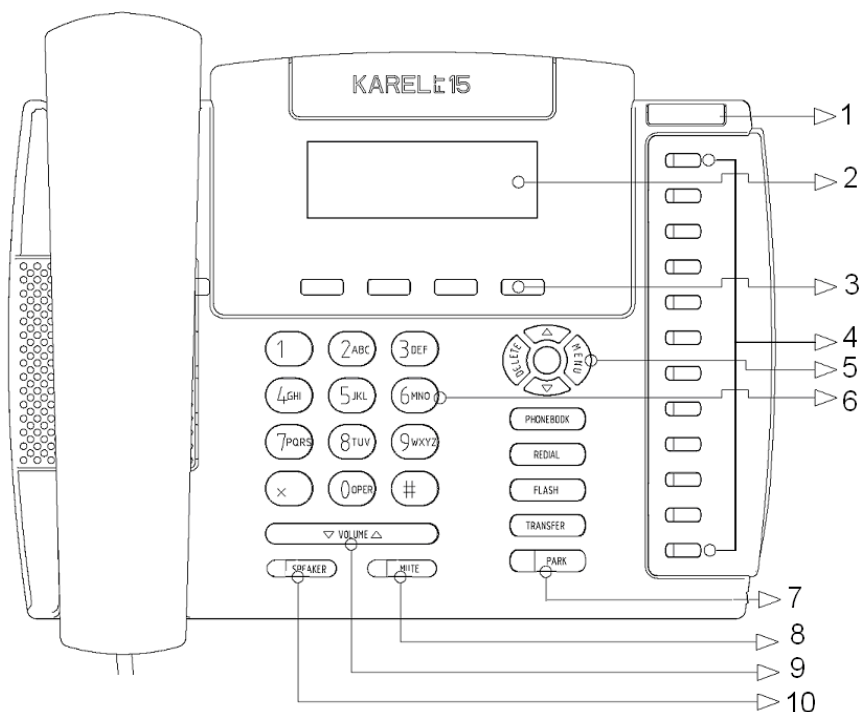
The **FT15** telephone set is compatible with the 3.11H or later software of the exchanges of models MS26C, MS38S, MS48, MS48S, MS48C, MS128 and MS224.

PARTS LIST ON DELIVERY

Parts included in the **FT15** package:

- FT15 telephone,
- Handset,
- Spiral cable of the handset,
- Data cable with RJ11 connectors at two ends,
- Console connection box,
- Technical Reference and User Guide CD,
- Wall hanging leg fixing screws (2 pieces)

GENERAL APPEARANCE



- | | |
|--|-------------------------|
| 1 Incoming Call LED | 6 Numerical Key Pad |
| 2 Display | 7 Special Function Keys |
| 3 Soft Menu Keys | 8 Handsfree Speaker |
| 4 Speed Dial Keys | 9 Volume Control Key |
| 5 Navigation and Special Function Keys | 10 Mute Key |

TECHNICAL SPECIFICATIONS

Weight: Approximately 1 kg

Dimensions: 25 cm x 20 cm (length, at the smallest angle) x 20 cm (height, at the biggest angle)

Operational Temperature: 0 °C - 40 °C

Storing Temperature: -20 °C - +60 °C

Humidity: 20 - %80 (non-condensing)

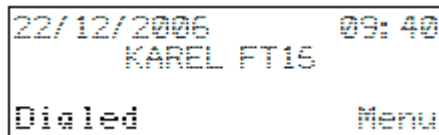
Dialing Method: DTMF (Tone dialing)

USER INTERFACE

INCOMING CALL LED

This LED indicates the user by blinking, when there is an incoming call or a new message.

DISPLAY



Information presentation display is of four lines with 20 characters. The following information that facilitates usage is present on the LCD display, which indicates the active features of the telephone and the functions of the flexible keys at that moment:

- Date, time
- Entry to the menu options, phone book
- Activated services (Such as Auto-dial, Follow Me and Redial)
- Call information (Incoming Call Extension 121, Missed Call E 121 1/01)
- Action options that can be taken for the active call and service (Such as Redial / Call, Missed Call E 113 Details?)

MULTI PURPOSE SOFT MENU KEYS

These keys are located below the display and they play an important role in usage of FT15. Actions that can be carried out and/or information that can be received by a user while:

- a call / conversation is being made
- the telephone is being programmed
- the telephone is on hook

are presented through the display.

Keys are used to confirm or activate the functions shown (just above the keys) in the bottom line of the screen. In addition, user can move between all offered options by using right and left navigation keys. (If there are options not more than two, then the navigation keys do not function.)

The functions of four soft keys just below the screen, change depending on the current situation of the phone (like 'Back', 'Cancel', 'OK', etc.), and they are displayed in the bottom line of the screen. Such a display will be actualized only if there exists a function programmed for the key or information to be accessed through the key.

NAVIGATION KEYS AND SPECIAL FUNCTION KEYS

- **“Navigation” keys (“▲”, “▼”):** User can move between features with these keys, when there are multiple options on the screen, also the related option can be enabled with them too. They are used to pass to the next/previous option or message in all of the menus.
- **“Menu” key:** This key activates the menus by which the telephone is programmed and it provides access to the submenus. (After entering the menu, the phone gets into the busy status. Exiting from the menu does not end the busyness of the phone)
- **“Delete” key:** This key provides to turn to the top-menu of active option in the menu.
- **“Enter” key:** This key is used for confirming and activating the option on the display. Functions of this key change according to the options prompted on the display.
- **“Phonebook” key:** This key provides access to the telephone book. If there is any record in this phone book, then those records, which are in alphabetical order, are directly displayed. The records that are present in the telephone at that time can be directly searched by name or number query through the “Find” option on that display. (Search with this ‘Find’ option can be made in MS Series software with the version ACA or better) Detailed information about the phone book has been presented in the relevant section.
- **“Redial” key:** It dials again the last number that has been dialed. This key functions the same way as the “Redial” option on the display. The difference between “Redial” and “Auto-dial” is that the “Auto-dial” option automatically calls the other party repeatedly until busyness status is over (actually, at most 16 times), whereas the “Redial” option calls only once.
- **“Flash” key:** It is used for putting the calling party on hold during an internal or external call. It has the same function with the ‘Hold’ option on the screen. A single call can be put on hold at a time by this key. When it is pressed for a second time, the call on hold is retrieved, or the call can be retrieved by the “Retrieve” option that appears when the ‘Enter’ key is pressed. It drops the line when it is used while the other party has not yet picked up the phone. There is no limit for the duration to press the key; however, in the event that the line that has been put on hold has not still be retrieved at the end of a certain period that is determined by the exchange software, the line may automatically be dropped.
- **“Transfer” key:** It is used for transferring an ongoing call to another call that is on hold. In order to actualize the transfer operation, first of all the conversing party should be put on hold by using the flash key or the “Hold” / “Park” option on the display. Afterwards, the number to which the transfer operation will be done is dialed. At this point, the operation is accomplished by pressing the transfer key before or after conversing with the extension to which the call is to be transferred. It has the same function with the ‘Transfer’ option on the screen.

- **“Park” key:** A line or an internal conversation can be parked through this key during the conversation. When the call is parked by using that key, “parked line” information and ‘Retrieve’ option for the line appear on the display. The call can be retrieved by pressing the “Enter” key or by pressing the “Park” key for a second time. A call can be parked more than once and more than one line can be parked at the same time. When a line has been parked, the telephone can be used independently from that external conversation, i.e., internal and external calls can be made by making use of the entire features. For OP50 users, if there are parked line and also parked internal call and if the other service is activated, the internal line call will be retrieved in turn with this key. (The first call which is parked will be displayed in the first rank of the park list.)

The second function of this key is, on the other hand, providing the relation between the exchange and the console. The key is employed when it is required to change the number of the telephone or to reset the connection to the exchange. When the key is pressed until the “beep” is received and then it is released, the telephone prompts for the extension number to be put on the data line of the exchange. In order to enter the “Terminal no=AA” value of OP50, this key is pressed consecutively to proceed until the correct extension number is displayed and the extension number will have been entered to the telephone upon lifting and then replacing the handset.

NUMERICAL KEY PAD

It is composed of 3x4 (DTMF) key matrix. Moreover, these keys are used for number or character (letter, figure or symbol) entry during the operations related to the “Phone Book”. If any programmable key is pressed when the letter entry is being made with capital letters, the entry starts to be made by small letters. By the same way, if any programmable key is pressed again, small letters turn into the capital letters. Grouping of the characters with respect to the keys are as follows. Standards that apply for similar applications have been complied with for this subject.

Group of “1”: (space) 1 \$ % &	
Group of “2”: A B C 2 #	(a b c)
Group of “3”: D E F 3:	(d e f)
Group of “4”: G H I 4 -	(g h i)
Group of “5”: J K L 5 ((j k l)
Group of “6”: M N O 6)	(m n o)
Group of “7”: P Q R S 7	(p q r s)
Group of “8”: T U V 8 +	(t u v)
Group of “9”: W X Y Z 9	(w x y z)
Group of “0”: 0 → ! ? =	

VOICE CONTROL KEYS

Control of voice features of FT15 telephones are fulfilled by making use of four keys:

“Speaker”Key: This is the key with red icon that puts the telephone into the “handsfree” status and that signifies this through an embedded LED. The key is called HF key, and the LED inside it is called HF LED.

(Handsfree: It is a feature of telephone that it emits voices into the room or transmits voices inside the room to the other parties while the handset is still on hook.)

Speaker key performs different functions in different cases. These are:

- When it is pressed while the handset is on hook, the telephone is picked up as “handsfree” and the H/F LED lights. In this case, a number can be dialed and a conversation can be made without lifting the handset. Pressing the key during a conversation terminates the conversation.
- The H/F LED starts to blink if it is pressed while dial tone or busy tone is being received over the handset or while a conversation is being made. If the handset is replaced before the H/F LED goes out, then one continues to receive dial tone or busy tone, or one can go on with the conversation. The conversation is terminated if the handset is replaced after the H/F LED has become off.
- If the handset is lifted during the handset status, then the rest of the conversation goes on via the handset. Replacing the handset terminates the conversation.
- While the handset is on hook, in the event that this key is pressed twice consecutively, the other party can be heard both via the handset and the H/F speaker. The opposite party would hear the things spoken via the handset only, but no voice would be transmitted to the opposite party via the H/F microphone. The conversation terminates by replacing the handset at this status.
- If “Headset” usage has been activated through menu options, then this key may also be used for putting the headset on line. Headset usage has been explained in detail in the relevant section.

“Volume ▼” Key: It is used to decrease the level of voice received during conversation while in the Handsfree mode.

“Volume ▲” Key: It is used to increase the level of voice received during conversation while in the Handsfree mode.

Mute Key: The key with a black icon, provides interruption of the outgoing voices during the all conversations and signifies that via the LED inside it. Pressing the key for a second time will maintain the voice transmission to the opposite party again.

PROGRAMMABLE SPEED DIAL KEYS

Two functions can be programmed for each of the speed dial keys, which consist of 12 keys with lights. Features that can be assigned to these keys through programming:

- Extension Number
- Line Number
- Private and Common Pool Number
- Function Services (Services such as Follow Me, Call Back, Do Not Disturb, Telephone Lock, Conference, Night Mode)

These assignments are done to the first or the second functions of the key during the program entry done by pressing the “menu” option. Assignment is done to the first function if the key is pressed for a short time, and it is done to the second one if the key is pressed for a longer period. Transition of the key to the first or second function is indicated by a short or a long beep, respectively.

When the keys that have been programmed for extension, line, private or common pool are pressed, these numbers are called directly.

When the keys that have been programmed for the services such as Follow Me and Call Back are pressed, these services are activated directly or a necessary input is prompted. (Such as the extension number, to which the Follow Me action will be carried out.)

FUNCTION PROGRAMMING FOR THE SPEED DIAL KEYS

This feature provides for taking advantage of some functions that have been defined for FT15 in the exchange properties, by pressing a single key. A user may program for those keys the features presented by the Karel telephone branch exchange, which s/he would use most frequently.

Different methods can be employed for assigning functions to the programmable keys of the FT15 feature telephone sets. These operations are carried out for FT15 through the submenus of Function, Private Pool or Automatic Programming in the Phone Settings > Key Settings option.

By the Function Programming Menu

Features most frequently employed by users are among those options. The programming can be carried out by assigning desired ones out of the 8 options that have been presented in the Key Settings > Feature submenu, in order to apply that programming option. First the key to be used is selected, then the desired one out of the 11 presented functions is brought to the display through the right/left navigation keys and the programming is completed by the “Accept” key. These selections have been explained below:

- **Follow Me Key:** If this key is pressed and then if number of an extension is entered, then forwarding to that extension is actualized and then red LED lights. If it is pressed again, then the forwarding is cancelled and the LED goes out.
- **Call Back Key:** If a called extension is busy or not answering and if busy tone is received upon attempting to access a line, then that extension / line is called back by pressing this key. In order to cancel the call back operation, the key is pressed again.
- **Do Not Disturb Key:** It puts that extension into the “Do Not Disturb” mode if it is pressed and the red LED starts to blink. In that case, telephone rings once when the extension is called. If it is pressed again, then the “Do Not Disturb” service is cancelled and the LED goes out.
- **Telephone Lock Key:** If this key is pressed and then a password is entered afterwards, then the telephone will be closed for external calls. The telephone will be open for external calls again, if the procedure is repeated in that mode. The corresponding red LED is on while the telephone is locked and goes out when it is unlocked.
- **Conference Key:** During a call with an extension or line, this key is employed for including another extension or line into the conference. If a line is desired to be included into the conference, the line with which the conversation is going on is put on hold by pressing this key and one proceeds to conversation status with the line to be included into the conference. A triple conference is established upon pressing this key again. If it is an extension that is to be included into the conference, then that extension is called after making hook flash during the call with an extension or line. The triple conference will have been established upon pressing this key, after initiating the conversation with that extension. If it needs the “Drop” option which is appeared during the triple conference can be used. At the time of conference the “Mute” key can be used in order to provide the interruption of the outgoing voice. During the conference with the extensions or lines the information of the ongoing conversation of the extension or line will be displayed.
- **Night Mode Key:** It can be employed only through the telephones that have been defined as the operator. It puts the system into the Night Mode when it is pressed and the LED will be turned on. If it is pressed again, then it puts the system into the Day Mode and the LED goes out.
- **Auto Dial Key:** The telephone automatically calls the corresponding number when the auto-dialer is activated. If the called party is busy, then the calling action is performed repeatedly in every 15 seconds. As soon as the business of the opposite party is over, the telephone notifies that by ringing itself or by short beep. If it is pressed again, then the auto-dial is cancelled and the LED goes out.
- **Message Key:** If there is an EVM module placed on the system and a voice message is left to the extension, the LED of this message key will blink to inform the extension a new message left. All voice messages left to you can be listened successively if this key is pressed. If a password has been defined before, a message “Please enter your password” will be displayed when the message key is pressed. After entering the password the voice messages can be listened. Also a message can be left to the busy or unanswered extension with this key.

Code Programming

By the Private Pool Programming Menu:

Twenty most frequently called external numbers can be programmed into the private pool of the telephone. Moreover, functions supported by the exchange can also be assigned to the keys by applying private pool programming. (Please refer to the user's guide of your exchange for information related to the functions supported by the exchange and the codes to program them.)

After entering "Register no=" via Key Settings > Private Pool submenu, codes of the entire features presented to users can be programmed for the "no=" option by primarily pressing the "*" key.

Example: An extension using the MS48 exchange can make conversation with a party at the door over telephone, provided that there is a door phone (the device for the action being mentioned) connected to the exchange and s/he can open the door upon wish through telephone, if the door connection has been made to her/his exchange. An FT15 user that employs those features frequently can facilitate utilization by programming those functions for the keys of the telephone. In order to do that, first the user's guide of the exchange should be referred to for information about the topics "Door phone Conversation" and "Door Opener". By this way, one would learn whether the exchange code for Door phone Conversation is 110 or 10 and the code for Door Opener is 151 or 129, as well as properties of the functions. Then, by accessing FT15 menu, submenus of "Phone Settings", "Key Settings" and "Private Pool" are selected, respectively. Upon the displayed warning, "Press Key", the memory key that will be used for door phone conversation is pressed. In case there is another function or extension number that has previously programmed for that key, it will be deleted. Once the key to be employed has been selected, the prompt "Register no=" is displayed. Each user has a capacity of 9 numbers reserved for her/him. A memory number in the range 01..09 is entered corresponding to the "Register no=" prompt on the display and the entered value is automatically confirmed. The sign "no=" appears on the display, afterwards. At this step, the exchange code of door phone is entered after pressing the "*" key shortly: (*110) or (*10). The programming is completed by pressing the "Accept" key. The display reverts to the "Private Pool" menu. The actions explained above are repeated for the door opener function as well; codes (*151) or (*29) is entered, then they are confirmed by the "Accept" key and the operation is thus accomplished. One reverts to the Key Settings submenu screen by pressing the "Up" key. Then the user can talk over the door phone or open a door, each by pressing a single key that s/he has previously chosen.

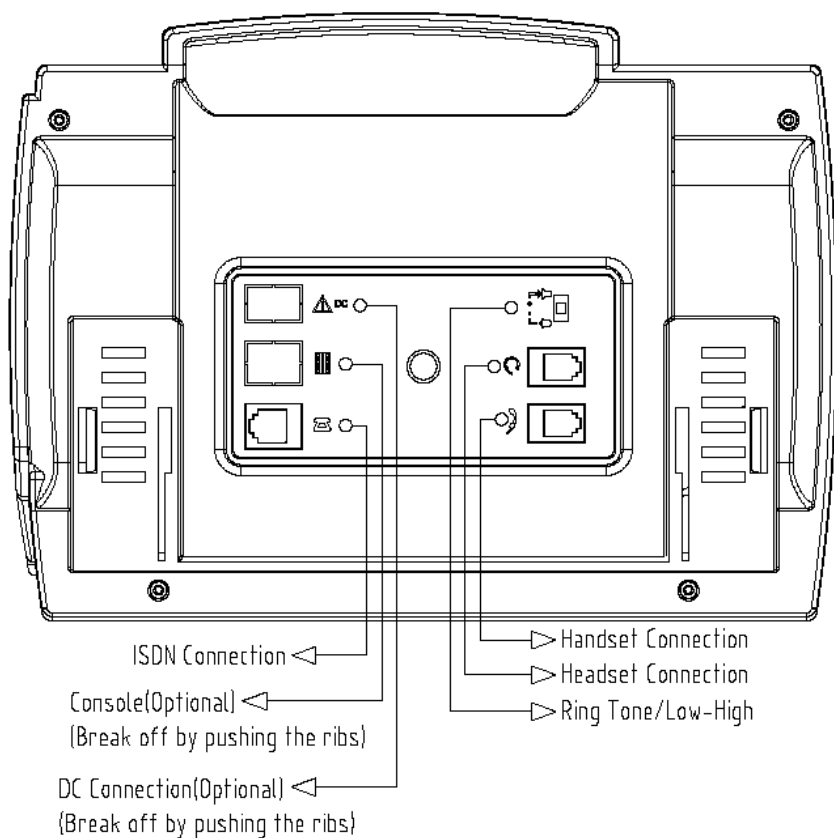
By Automatic Programming Menu:

In FT telephone sets, possibility of assigning different functions to the entire keys simultaneously is provided via the Auto Setting option under the Key Settings menu. This feature will be explained in detail later in the section "Auto Settings". Via the automatic programming, about 20 functions can be programmed for the FT telephone sets at the same time. These functions can be changed later one by one, as already explained in the sections above, or they can be cleared through the "Clear All?" option in the same menu.

INSTALLATION

CONNECTION POINTS

Under FT15, there are five connection points and a switch that provides selection between the low/high voice levels. Connections and their characteristics have been illustrated below.



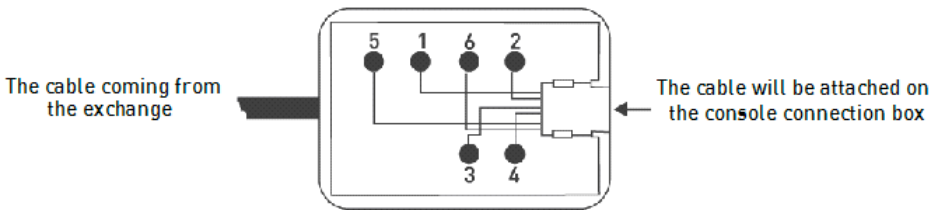
FT15 INSTALLATION

In order to operate the telephone, first, the spiral handset cable is connected to the connection point under the telephone and to the handset. Then FT15 must be connected to the KTS line of the exchange.

Required Hardware For The Connection:

FT15 is presented to the user together with a “telephone data cable” of length 2.5 m. and a connection box. There are 6-pin, RJ-type male connectors at both ends of the “telephone data cable”. One end of this cable has been attached to a 6-pin, RJ-type female connector that is on the connection box. The connector at the other end of the cable will be attached to its correspondent under FT15. The cavity, which is on the side of the connection box without the 6-pin, RJ-type female connector, has been left for other cabling that would be carried out on the box. (Parallel connection of the DATA / +12 VDC / GROUND (GND) signals and A / B terminal connections.)

Those signals are present on the console connection box that is included in the FT15 hardware:

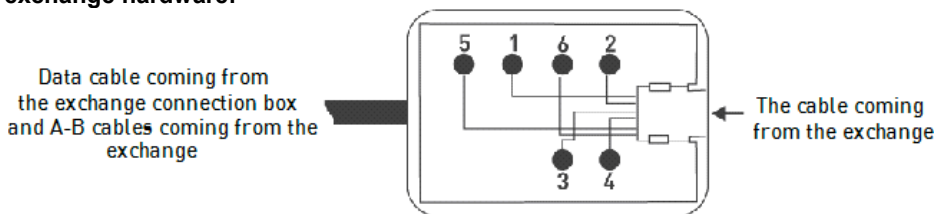


1. + 12 VDC
2. No connection
3. B (Tip) signal coming from the corresponding extension
4. A (Ring) signal coming from the corresponding extension
5. Ground (GND)
6. Data signal

In addition to the telephone data cable, another cable that can be used during installation is the “system data cable”, which is distributed as one for each exchange. One end of the “system data cable” has been attached to its connection box. On the other, there is a connector at the free end of the cable, which is fit for the KTS (serial data) port socket of the corresponding exchange.

The 6-pin, RJ-type male connector on the other side of the connection box will be employed for parallel connection of data / +12 VDC / ground signals.

Those signals are present on the exchange connection box that is included in the exchange hardware:



1. + 12 VDC
2. Busy
3. No connection
4. No connection
5. Ground (GND)
6. Data signal

NOTE: The “Busy” signal is used for KY16 Mini Printer, which is another KAREL product.

If the distance between the exchange and FT15 is more than the total lengths of the two cables mentioned above (approximately 4 meters), then it would be necessary to obtain flat telephone cable in order to make the connection between the two connection boxes. Note that the cable should comply with the standards.

Connecting FT15 To The Exchange:

Cabling of the first telephone to be connected to the KTS line of the exchange:

- 1) Free end of the “system data cable” is attached to the KTS port socket of the system.
- 2) One end of the “telephone data cable” is attached to the connection box that is at the end of the system data cable. The other end is connected to the FT15 telephone.
- 3) Connection of the A-B wires of the corresponding extension is made to the connection box. In order to do that, two wires taken from the corresponding extension connector of the exchange are attached to the red and green points on the connection box.

NOTE1: If the exchange is MS26C, MS38S or MS224, and if the first FT15 will be connected to the operator, then connections of the extension wires should not be made, because the A and B connections for the operator are also ready on the KTS sockets of those exchanges. Additional realization of those connections may prevent the exchange from operating.

- 4) After the telephone has been connected, the extension settings should be done, as will be explained in the next section.

Cabling of the telephone while there is another device connected to the KTS line of the exchange:

1) Parallel connection should be made from the connection box of the device that has previously been connected to the KTS line to the wires that carry data (white), +12 VDC (blue) and ground (black) signals and this connection should be made in the same order to the connection box of the FT15 that is newly to be connected to the exchange.

NOTE: Short circuit or wrong order of the wires during the installation may result in improper operation or malfunction of the exchange or the other devices that have been connected to the KTS line.

2) Then, extension connection to FT15 should be made. In order to do that, two wires taken from the corresponding extension connector of the exchange should be attached to the red and green points on the connection box of FT15.

3) After the telephone has been connected, the extension settings should be done, as will be explained in the next section.

IMPORTANT NOTE: If FT15 is to be connected over a distance longer than 5 meters, then A-B (ring-tip) and serial data (KTS) wires should be carried over separate cables, one should especially pay attention to employ shielded cables for long-distance installations of serial data wires.

Defining Extension Number for FT15

At the first moment **FT15** is connected to the exchange, the two-digit extension number is displayed in the “Terminal no=aa” format. That number has been set as “11” as factory default and it signifies the last two digits of the extension number.

If the data on the LCD display are changing upon lifting and replacing the handset, then that indicates extension settings are correct. However, if those data are not changing, then the extension number of FT15 must be set. In order to do that:

1) The “Park” key is pressed until the message “Terminal no=aa” appears on the display (aa= a two-digit number – last two digits of the physical number of the extension.)

2) One proceeds by pressing the “Park” key in short whiles until the extension number that is desired to be set appears on the LCD display.

3) When the desired number has appeared on the display, the handset is lifted and replaced once. From then on, FT15 will operate at that defined extension.

NOTE: When number of another extension of the exchange is entered to FT15, the speech channel is activated; however, the data line does not function.

Number of FT15s That Can Be Connected to the Exchange and Connection Distances

- 1) The FT15 telephones can be connected to the first 16 extensions of the exchange.
- 2) Number of FT15s that will be connected to the exchange and accessories using the external data line of the exchange should not exceed 8 in total. **The maximum number of FT15 which will be connected to the system can be 8.**
- 3) If “data / 12 VDC / ground” signals and the “A / B” wires are carried to FT15 over separate cables, then an FT15 can be located at most 250 meters far from the exchange in the event that ordinary cables are employed.

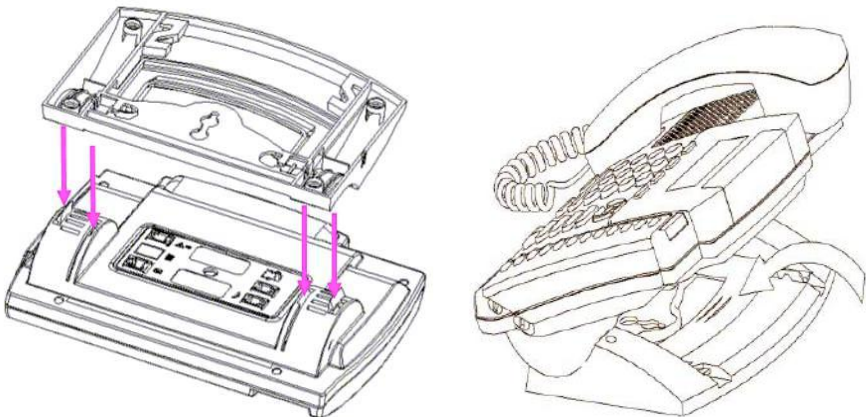
That distance would decrease as the number of feature telephone sets that are connected to the exchange increase. For example, when 8 FT15s are connected to the exchange as previously explained, the maximum allowed distance between the telephone sets and the exchange drops to 25 meters.

In such a case, if the “12 VDC” signal amplitude of the last FT15 drops below +8.5 VDC, then the performance may be improved by connecting a +12 VDC power supply between 12VDC and ground terminals.

FT15 Usage on Table with Angle Adjustment or On Wall

When used as a desktop phone, with the help of its adjustable stand, the angle between the phone and table can vary between 20 and 60 degrees.

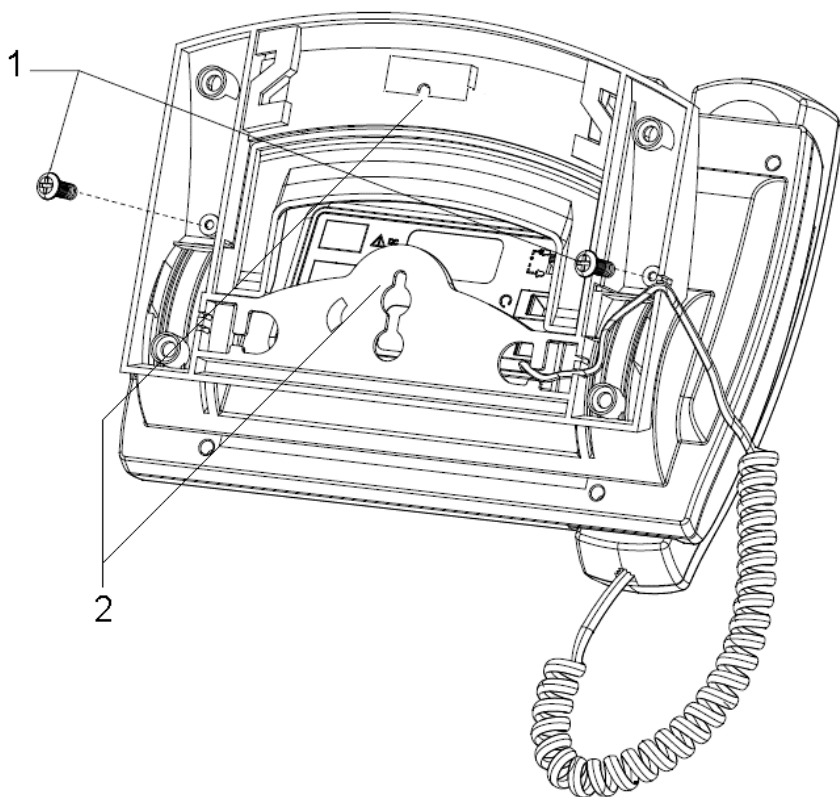
To adjust the angle the telephone must be moved up-down by pressing the point shown in the figure below.



To hang the telephone on wall, two vertical holes (8 cm apart from each other) appropriate for the anchor plug and screws must be placed on the vertical surface where the telephone will be hung.

The anchor plugs must be placed in the holes and the screws must be placed in these plugs such that their heads are 3 mm outside of the hanging surface.

Then the telephone's leg must be adjusted to its horizontal position and as shown in the figure below, the stand must be fixed to the telephone mold with the help of screws. Then the screw dents at the backside of the telephone can be hung to the screw heads on the hanging surface.



1. Fixing screws
2. Hanging dents

FT15 Start-up State

The telephone set would be ready for operation after the required connections have been made and the correct extension number has been defined. The display and the programmable keys start to perform their functions.

By default, there is no program assignment for the programmable keys. These keys are to be programmed by user according to needs. Please refer to the section “Key Settings and Automatic Settings” in this guide for detailed information. In order to change settings of your telephone and other settings of your exchange, refer to the section “Phone Settings”. Settings of telephone set are not cleared as the exchange is shut down and then powered.

If the telephone set has previously been connected to the system and if it is connected again after having been removed, then it gets ready for use within a few seconds. In that short period, first the version information of FT15, then the “Terminal No:aa” message appear on the display. After that message the telephone would be ready for utilization.

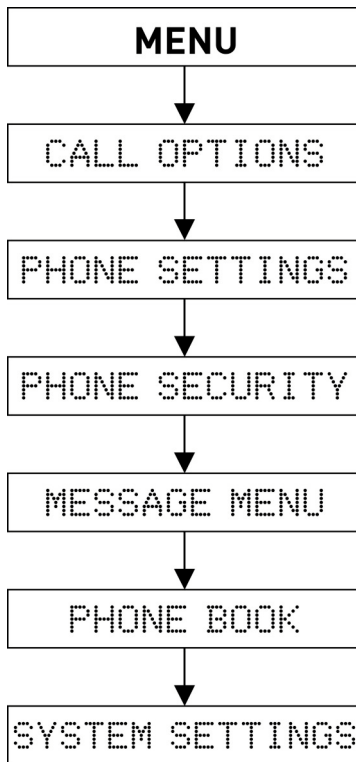
In the event that the exchange is reset or is shut down and restarted while the telephone has been connected to the exchange, the telephone first waits for the system to start and display the version information of FT15 and then the message “Terminal No: aa” (for 15 sec.), then it establishes the connection with the exchange after that waiting period.

PROGRAM FEATURES

PROGRAMMING MENUS

The user performs entrance to programming by making use of the flexibly functional selection key that is under the option “menu” that appears on the display or specially functional MENU key, while the telephone is off hook and dial tone is being received.

The programming features consist of 6 main menus and their submenus. Characteristics of the entire menus have been explained below.



CALL OPTIONS

Submenu titles:

- **Call Diversion**
 - All Calls/ Extension No=
 - No Answer/ Extension No=
 - No Answer Cancel
- **Auto Dial**
 - Last Number
 - Private Pool/ Register No=
 - Common Pool/ Register No=
- **Paging**
 - All
 - Group/ Extension No=
 - Extension/ Extension No=
- **Missed Calls**
- **Answered**
- **Dialled**

Call Diversion

- When **All Calls** is selected and an extension number is entered within 30 seconds, all calls coming to the FT user rings at the extension specified here.
- When **No Answer** is selected and an extension number is entered within 30 seconds, an incoming call is forwarded to the extension specified here, if it is still not answered although it has rung three times.
- **No Answer Cancel** option can be selected to cancel the previously activated Follow Me No answer feature.

Auto Dial

The telephone automatically calls the corresponding number when the auto-dialer is activated. If the called party is busy, then the calling action is performed repeatedly in every 15 seconds. As soon as the busyness of the opposite party is over, the telephone notifies that by ringing itself or by short beep. This feature can be deactivated by using the “Cancel” option on the display.

- By selecting the **Last Number** option, the most recent number that has been dialed is automatically called.
- When the **Private Pool** option is activated, the private pool numbers, which have previously been entered into the memory by the menu “Private Pool Entry”, are automatically called. The value to be entered here is one of the private pool indices in the range 01-09 for FT15.
- By the **Common Pool** option, the common pool numbers, who have been stored in the exchange and whose entries have been done by the operator only are automatically called. The value to be entered here is one of the common pool indices in the range 00-99 for FT15.

Paging

In connection with the handsfree feature, pagings in several forms could be done in order to be heard through the speakers of the telephones while dial tone is being received.

- **All**
- **Group**
- **Private**

Missed Calls

Information about the most recent 20 Missed Calls for OP50 successively viewed including source and time of the call. In the event that there are more than one Missed Calls, they can be browsed by using the navigation keys on the display. In case the source of the unanswered call is an extension, if name of the extension is present in the phone book, then that name is displayed instead of the number. The "Call" option in that menu provides for direct calling of the number.

If any call or active service information comes while the missed calls are displayed on the screen, the missed call information is assumed as unread and are not deleted from the list. When user wants to see the all missed calls that will have the opportunity to see this missed call again.

Answered

Information about the most recent 20 Answered Calls can be successively viewed including source and time of the call. In the event that there are more than one Answered Calls, they can be browsed by using the navigation keys on the display. In case the source of the answered call is an extension, if name of the extension is present in the phone book, then that name is displayed instead of the number. The "Call" option in that menu provides for direct calling of the number.

Dialed

Information about the most recent 20 Dialed Calls can be successively viewed including source and time of the call. In the event that there are more than one Dialed Calls, they can be browsed by using the navigation keys on the display. In case the source of the dialed call is an extension, if name of the extension is present in the phone book, then that name is displayed instead of the number. The "Call" option in that menu provides for direct calling of the number.

IMPORTANT NOTE: In order to make a line call by using the "Call" option in these menus, the "Line Access Code" must be defined before, through the "Phone Settings" menu.

PHONE SETTINGS

Submenu titles:

- **Key Settings**
 - Extension
 - Press Key / Extension No=
 - Line
 - Press Key / Line No=
 - Private Pool
 - Press Key / Register No=/ No=
 - Common Pool
 - Press Key / Register No=
 - Feature
 - Press Key
 - Follow Me
 - Call Back Key
 - Do Not Disturb Key
 - Phone Lock Key
 - Conference Key
 - Night Mode Key
 - Auto Dial Key
 - Message Listen Key
 - Auto Setting
 - Option1
 - Option2
 - Option3
 - Option4
 - Clear All?
- **Do Not Disturb**
 - Enable
 - Disable
- **Background Music**
 - Enable
 - Disable
- **Reminder**
 - Without Message / Time=
 - With Message / Time= / Please Leave Message

- **Eprom Version**
 - System Version
 - FT Version
- **Lazy Mode**
 - Enable
 - Disable
- **Language**
- **Headphone**
 - Disable
 - With Handsfree
 - Without Handsfree
- **Signal Beep Option**
 - Enable
 - Disable
- **Price**
 - Last Call
 - Meter Pulse Price
- **Line Access Code**
- **Return Factory Set.**
- **Backlight**
 - Level
 - On / Off / Auto

Key Settings

Number of keys that can be programmed is 12 in total and assignments of programs are done to those. In case the user presses those keys continuously for one second, the second function of the key is detected. Therefore, total number of features that can be programmed becomes 24. During programming, the LED that belongs to the keys signifies to which key and to which function of the key the assignment is done by lighting in two colors. When the LED is observed to be lighting in green by pressing the key until the single short beep is received, the first function will have been assigned and the second function will have been assigned when the LED is observed to be lighting in red by pressing the key until the short beep is received for the second time (for 1 second.) The keys become active after the programming mode is exited

The assignments performed on these keys cannot be cancelled one by one; however, new assignments can be done to them without encountering the error signal. Cancellation of contents of the programmable keys can be carried out by selecting Phone Settings > Key Settings > Auto Setting> Clear All.

Extension

You can reach an extension you call frequently through a single key by programming her/his number on that key. In order to do that, one first proceeds to the programming menu.

- ◆ **Press Key:** The key, on which the programming will be done, is pressed for a short or a long period in order to select the first or the second function, respectively.
- ◆ **Extension no:** Then the “Extension No=” menu comes to view. In this menu, the display cursor enables data entry. After the user enters the extension number by using the numeric keypad, s/he confirms the extension number s/he has entered by pressing the “Accept” key. The extension number is of 3 digits for **FT15**. In case an **FT15** user attempts to enter an extension number with more than 3 digits, the program takes the first three digits as the extension number and then proceeds to the next menu.

After the acceptance of the extension number, if the extension number, which is desired to be programmed, has previously been set on any key before, then the pre-programmed key is cancelled and the new one is used. (An extension number can be assigned to a single key only.) If, on the other hand, the number has not been programmed before, then **FT** checks whether the entered number is a correct one (whether it is defined in the system.) In the event that the entered number on **FT** is not correct (defined in the system) the “Erroneous Number” message is displayed for 1 second and error tone is received.

After the programming mode is exited and those keys are pressed, the extension that has been stored on the key is directly called. In addition to the calling function, status of the extension, which has been programmed as the first function of the programmable keys can be viewed by the LED next to it, as described below.

Extension Status	Red LED
On Hook	Off
Busy	Continuously On
Ringing	Blinking
Calling the Operator	Blinking fast

Line

It enables you to program a specific line number on a key. By pressing that key, you can access the line that has been programmed on the key and make a call (provided that it is vacant) and you can access that number by a single key. In order to do that, one proceeds to the extension programming menu.

- ◆ **Press Key:** The key, on which the programming will be done, is pressed for a short or a long period in order to select the first or the second function, respectively.

- ♦ **Line no:** If a determined line number is entered and confirmed, then that line number will have been assigned to that key.

Programming one of the line access codes such as 01,02... for **FT15** is sufficient for accessing the line directly when the programmed key is pressed. The programmed key detects the number as 701,702... and provides making calls by accessing the line. If an incorrect code is entered, on the other hand, the user is warned by the message "Erroneous Number".

A line access code can be assigned to a single key only. After the programming mode has been exited, upon pressing those keys, it is possible to access the programmed line, without pressing **9**. While a line that has been assigned to a programmable key has already been accessed, if that key is pressed, then the line is parked. The line is retrieved upon pressing the key again. Status of the line, which has been programmed as the first function of the key can be viewed by the LED next to it, as described below.

Line Status	Red LED
Vacant	Off
Busy	Continuously On
Call request is being received	Blinking
Parked	Blinking fast

Private Pool

You can program 9 line numbers for FT15, which you call most frequently on the private pool of your telephone. You could shorten duration of calling action by programming the memory numbers on the keys. On the other hand, it can be used for FT15 for two kinds of programming. The first of them is a kind of memory storage, in which 01-09 entries can be stored and determined numbers are entered by the "no=" option. In the second of them, the entire programming codes out of the service options that have been specified in the user's guide can be assigned to the programmable keys by entering the Feature codes.

- ♦ **Press Key:** The key, on which the programming will be done, is pressed for a short or a long period in order to select the first or the second function, respectively.
- ♦ **Register no:** Afterwards, the "Register no=" menu is displayed. In this menu, the display cursor enables data entry. As soon as the user enters the second digit of the number s/he has started to enter (01-09), FT15 automatically confirms the number and checks whether the memory number that has already been entered has previously been assigned to any key (this system is like the one in the extension programming.)
- ♦ **No:** The desired line number or access code is entered. In order to assign the service codes, on the other hand, first of all one of the codes that are mentioned in the user's guide is dialed after pressing the "*" key and then it is confirmed. By this way the service code is assigned to the key.

Common Pool

Line numbers that have been stored in the common pool memory fields with number 00-49 by the operator can easily be assigned to the programmable keys.

- ◆ **Press Key:** The key, on which the programming will be done, is pressed for a short or a long period in order to select the first or the second function, respectively.
- ◆ **Register no:** Indices that belong to the line numbers, which have been entered into the common pool of the exchange, are assigned to the programmable keys by this menu option. After exiting the programming mode, when these keys are pressed, the common pool number that has been assigned to the key is directly called.

Feature

It provides making use of some functions that have been defined in the system by pressing a single key. For example, in order for the call requests coming to you to ring at some other extension, you can press the key that has previously been programmed and enter the number of the extension, to which you would like your calls to be forwarded.

- ◆ **Press Key:** The key, on which the programming will be done, is pressed for a short or a long period in order to select the first or the second function, respectively.
- ◆ Then the “Function/ Follow Me Key” menu is displayed. Through the down key, the desired feature is reached in this menu. After the user has reached the function s/he wants, confirms it by pressing the “Accept” key. It is checked whether the selected function has previously been set. If it has been set before, then the program is not accepted; it is accepted only if it has not previously been set and the LED that belongs to that key is turned on. (This system is like the one in the Extension Programming, the message “Successful” is displayed for 1 second and confirmation tone is received.)

The functions are as follows:

- Follow Me
- Call Back
- Do Not Disturb
- Telephone Lock
- Conference
- Night Mode *
- Auto Dial Key
- Message Listen Key
- Call Pick Up Key

* It applies only when the user is the operator.

Auto Settings

There are five different options in order to program the programmable keys automatically. The keys are automatically programmed upon proceeding to the desired option and selecting it. These programming options are:

- ◆ **Option 1** (Extension Numbers)
- ◆ **Option 2** (Line Numbers)
- ◆ **Option 3** (Common Pool Numbers)
- ◆ **Option 4** (Automatic Functions)
- ◆ **Clear All**

How the keys will be programmed by each option has been illustrated through diagrams below. **Here, “E” is the abbreviation for extension numbers, “L” for line numbers and “CP” for the common pool.**

Option 1			
1.key	Func1 E 111 Func2 E 123	9.key	Func1 E 117 Func2 E 129
2.key	Func1 E 112 Func2 E 124	10.key	Func1 E 118 Func2 E 130
3.key	Func1 E 113 Func2 E 125	11.key	Func1 E 119 Func2 E 131
4.key	Func1 E 114 Func2 E 126	12.key	Func1 E 120 Func2 E 132
5.key	Func1 E 115 Func2 E 127	13.key	Func1 E 121 Func2 E 133
6.key	Func1 E 116 Func2 E 128	14.key	Func1 E 122 Func2 E 124

Option 2			
1.key	Func1 L 1 Func2 L 13	9.key	Func1 L 7 Func2 L 19
2.key	Func1 L 2 Func2 L 14	10.key	Func1 L 8 Func2 L 20
3.key	Func1 L 3 Func2 L 15	11.key	Func1 L 9 Func2 L 21
4.key	Func1 L 4 Func2 L 16	12.key	Func1 L 10 Func2 L 22
5.key	Func1 L 5 Func2 L 17	13.key	Func1 L 11 Func2 E 23
6.key	Func1 L 6 Func2 L 18	14.key	Func1 L 12 Func2 E 24

Option 3			
1.key	Func1 CP 00 Func2 CP 12	9.key	Func1 CP 06 Func2 CP 18
2.key	Func1 CP 01 Func2 CP 13	10.key	Func1 CP 07 Func2 CP 19
3.key	Func1 CP 02 Func2 CP 14	11.key	Func1 CP 08 Func2 CP 20
4.key	Func1 CP 03 Func2 CP 15	12.key	Func1 CP 09 Func2 CP 21
5.key	Func1 CP 04 Func2 CP 16	13.key	Func1 CP 10 Func2 CP 22
6.key	Func1 CP 05 Func2 CP 17	14.key	Func1 CP 11 Func2 CP 23

Option 4			
1.key	Func1 Phone Lock Func2 Door Opener	9.key	Func1 Call Park Func2 E 113
2.key	Func1 Message Listen Func2 Door Phone	10.key	Func1 Parallel Operator Func2 E 114
3.key	Func1 Auto-Dial Func2 Hookflash	11.key	Func1 ACD Func2 E 115
4.key	Func1 Reminder Func2 Lazy Mode	12.key	Func1 Mute Func2 E 116
5.key	Func1 Do Not Disturb Func2 E 111	13.key	Func1 Night Mode Func2 E 117
6.key	Func1 Follow Me Func2 E 112	14.key	Func1 Music Func2 E 118

Do Not Disturb

- ◆ When **Enable** is selected, telephone rings once in every 20 seconds for an incoming call.
- ◆ Do Not Disturb mode is cancelled upon selection of **Cancel**.

Background Music

- ◆ By the selection of Enable, music that has been loaded to the exchange can be listened to. This option can be employed especially for the lines that are put on hold.
- ◆ Listening to music option is deactivated by Disable.

Reminder

- ◆ **With message:** Following the entry of the reminder time in “HHMM” format, a message with maximum duration of 30 seconds could be recorded without waiting for any notification signal. Whenever the reminder is active, the reminder tone is received from the telephone. In the meantime, the recorded message can be listened to repeatedly upon pressing the H/F key. In that case, upon using the H/F key once again, the message and the reminder are cancelled. This option is displayed only when there is an EVM module installed in the system.
- ◆ **Without message:** It provides for receiving of the reminder tone until the telephone is picked up and then hanged up at the time of reminding, which has been entered in “HHMM”.

EPROM Version

By this menu option, one can reach version information of an MS-series exchange and the FT15 telephone set.

- ◆ **System Version:** Example: -MS48 CAA
- ◆ **FT Version:** Example: FT15 AAG

Lazy Mode

- ◆ **Enable:** When the lazy mode is activated, the telephone is picked up automatically in handsfree mode and the call is answered. (If the headset is active, it is picked up automatically in headset.)
- ◆ By selecting **Disable**, the lazy mode is exited; hence the telephone is not automatically picked when a call is received.

Language

Any desired one out of the language options that are displayed here, such as Turkish, English, Spanish, Afrikaans, Portuguese, Russian, French and Greek can be selected and the telephone starts to display menu messages in the selected language.

Headphone

The “Headset” option, which is presented in order to make use of the telephone comfortably by a headset, offers three different options as disable, with handsfree and without handsfree.

- ◆ **Disable** mode is already active when the “headset” option is selected for the first time. It is employed for canceling the different later options.

- ◆ When **With handsfree** is selected, the telephone is picked up through the headset while it is on hook, by the fast handsfree key. Upon pressing it again, the headset is turned off and the telephone gets into the HF mode. The HF is switched off and the conversation ends, in the third use of the key. If the handset is lifted up during the conversation with headset, voice is divided into two, so volume decreases.
- ◆ When **Without handsfree** is selected, the telephone is picked up through the headset while it is on hook, by the fast handsfree key. Upon pressing it again, the headset is turned off, the telephone does not get into the HF mode so the conversation is finished. If the handset is lifted up during the conversation with headset, voice is divided into two, so volume decreases again.

In order to facilitate the headset utilization "Lazy Mode" can be selected too.

Signal Beep Option

- ◆ When the **Enable** option is selected, a special warning tone is received for an incoming call, in case the phone is busy.
- ◆ The warning tone is cancelled through the **Disable** option.

Moreover, while the warning sound is active or not, the "Warning AA" is shown on the screen when the extension is warned in the busy status. Here, AA indicates the number of the extension who makes the warning.

Price

- ◆ **Meter Pulse Price;** By this menu, upon entering the pricing data of maximum five digits, which is considered to correspond to one pulse price, the pricing information based on that pulse price information is shown on the display during conversations. In line conversations, which the line pricing program was entered, price based on the credit information can be seen on the display of FT.
- ◆ By the **Last Call** selection, pricing of the last line, over which the call has been made is done.

Line Access Code

With this facility, the number information of the call will come with the information of the line access code, which has been defined before.

When the facility is selected, there is a cursor which supplies maximum 1 digits to be entered displayed on the screen. With this cursor the desired "line access code" is entered and then it is confirmed in order to be saved into the memory of the phone.

The existing line access code (D) will be shown on the right side of the display when the "Line Access Code" menu is entered.

Return Factory Set.

With this facility, you can return back to the original settings of your telephone: the language will be set to Turkish and the keys are automatically programmed as Option1.

Before the original settings are applied, the confirmation of the user is required.

Backlight

- ◆ With **Level** option the backlight of the LCD can be adjusted in 8 different levels.
- ◆ The options **ON / OFF / Auto** can be used to turn off or turn on the backlight of the LCD. It is also possible to turn off the backlight automatically after 10 seconds of idle state.

PHONE SECURITY

Operations of defining / changing passwords, which are required in order to make use of features such as making calls or listening to messages through another extension within one's own authorization limits, can be carried out through this upper menu item.

Submenu titles:

- **Password**
 - Define (If there is no password)
 - Change (If there is password)
 - Cancel (If there is password)
- **Phone Lock** (If password has been defined)
- **Phone Unlock** (If telephone is locked)

Password

In case the user has no defined password:

- ◆ When **Define** is selected, a password consisting of 3 digits (000...250) for FT15 is expected to be entered.

In case the user has previously entered a password of her/his own:

- ◆ By the **Change** option, an existing password can be changed. First of all, the old password is entered and confirmed, and then the new one is entered. The new password will be active for later operations.
- ◆ By the **Cancel** option, the currently used password is cancelled and operation requiring a password cannot be done from then on. A password must be defined in order to enable such operations.

Phone Lock

- ◆ **Password:** This menu appears only when the telephone is not locked and becomes active, if a password has been defined before. By this menu option, password query before line access, as well as telephone locking, is provided.

Phone Unlock

- ◆ **Password:** This menu appears only in the event that the telephone is locked. The telephone can be unlocked by using the "Unlock" option and then entering password.

MESSAGE

It appears only when there is an installed EVM module (and DRAM module for the two-channel EVM.)

Submenu titles:

Absent Message

- Read Message
- **Message Listen**
 - All Messages
 - Message
 - Password= (If password has been defined)
 - New Messages
 - Message
 - Password= (If password has been defined)

Absent Message

- ◆ **Read message:** By this menu, you could leave a message to be announced to people who call you when you are not at your place, provided that you confirm the message through the “Terminate” key. In case the absent message is employed, the telephone does not ring when a call is received; instead, the calling party hears the recorded message. The maximum message duration is 30 seconds. If one uses the phone for any reason (such as making a call) the ‘Absent Message’ is canceled.

Message Listen

You can successively listen to the messages you have received. With the message key which informs that there is a new message through the related LED which blinks, the new message can easily be listened to. If a password has been defined, you will be required to enter it.

- ◆ **All messages:** By this menu option, you can listen to the entire (actually, the ones which have not been *erased.) messages you have received.
- ◆ **New messages:** By this menu option, you can listen to the new messages you have received.

NOTE: * The messages, which are listened to by using the “New messages” menu option are erased in 15 minutes unless they are “locked”.

PHONE BOOK

A phone book of **60** entries in total can be created by using this upper menu item. 16 characters are reserved for the entry of name/number into the Phone Book. In the event that any information of call, conversation, Missed Call, hold, park or forwarding that is related to a number stored in the phone book is received, the name corresponding to that information is displayed. The “Find”, “Add”, “Change” and “Delete” options in this menu can be accessed by the navigation keys. (The “Add” option is not shown while the phonebook is full.)

If there are no records that have previously been stored in the phone, that upper menu item presents only two options, namely, “Add” and “Change”. The option “Change” here applies only for the permanent message that will be displayed continuously on the off-hook display of the telephone. 18 characters are reserved for the entry of the constant message. Once the option “Add” is employed, additional options are also presented to the user. Note that, while operations related to the entire options are being done, the up key on the display can be employed for deleting letters or figures.

Submenu titles:

- **Find**
 - Find By Name
 - Find By Number
- **Add**
- **Change**
 - Find By Name
 - Find By Number
 - Constant Message
- **Delete**
 - Find By Name
 - Find By Number
 - Clear All

Find

Searches can be performed among the records in the phone book by using this menu. Submenus “Find by name” and “Find by number” are located within this menu. (FT15 users can use this facility if the MS system software version is ACA or better.)

- ◆ **Find by name:** By using this menu, characters are entered and the Find operation is performed. When the FT telephone set finds the matching name within the records, that entry is displayed. In case the telephone could not find the exact name, the most similar entry starting with the same letter as the searched name is displayed. On the other hand, in the event that no entry starting with the same letter as the searched name is found, the telephone set displays the first entry that starts with the alphabetically next letter after the first letter of the searched name.

- ◆ **Find by number:** By using this menu, the user enters a number and carries out the Find operation. In case no record that matches the entered number is found, the telephone set presents the entry within the records, which comes first with respect to the alphabetical order of their first letters. When any record is found, the other entries could also be inspected by using the navigation keys. While those records are being displayed, the user can exit the records and go back to the main menu by using the key “Up”.

Add

The user can store data into the phone book by using this menu. When this menu is accessed, the telephone set prompts the user to enter a name (at most 16 characters). After the user confirms the name by the “Enter” key, the telephone set prompts the user to enter the number. (If the entered name is 16 characters, the phone switches to the number section automatically.) Following the number entry, storing operation is completed by pressing the “Enter” key again.

Change

The submenus “Find by name”, “Find by number” and “Constant message” are located within this menu. The entry to be changed is found by using search menus, as described above. When the searched entry is found, while the records are being displayed, the query “Change?” is also displayed. The user initiates the change operation by pressing the “Enter” key. After the necessary changes have been made on the record, the user terminates the change operation by pressing the “Enter” key again.

- ◆ **Find by name:** By using this menu, characters are entered and the change operation is performed. When the FT telephone set finds the matching name within the records, that entry is displayed. In case the telephone could not find the exact name, the most similar entry starting with the same letter as the searched name is displayed. On the other hand, in the event that no entry starting with the same letter as the searched name is found, the telephone set displays the first entry that starts with the alphabetically next letter after the first letter of the searched name.
- ◆ **Find by number:** By using this menu, the user enters a number and carries out the change operation. In case no record that matches the entered number is found, the telephone set presents the entry within the records, which comes first with respect to the alphabetical order of their first letters. When any record is found, the other entries could also be inspected by using the navigation keys. While those records are being displayed, the user can exit the records and go back to the main menu by using the key “Up”.
- ◆ When **Constant Message** is selected, the entry message can be recorded or changed. Content of the entry message is KAREL by default.

Delete

The submenus “Find by name” and “Find by number” are located within this menu. The entry to be deleted is found by using search menus, as described above. When the searched entry is found, while the records are being displayed, the query “Delete?” is also displayed. The user accomplishes the deleting operation by pressing the “Enter” key.

- ♦ **Find by name:** By using this menu, characters are entered and the deleting operation is performed for any desired record.
- ♦ **Find by number:** By using this menu, a number is entered and deleting operation is performed for any desired record.
- ♦ **Clear All:** When the “Accept” key is pressed in this menu, the entire phone book records and the entry message is deleted from the memory.

Things to pay attention to while entering names and numbers to the phone book:

Numeric keypad is employed to enter names in any one of the submenus of the phone book main menu. Characters, which these keys contain, have been explained under the title “Numeric Key Pad”.

- When one uses the “Add” option, first a blank screen is seen to enter the name of the entry. Upon the name is confirmed by the ‘Enter’ key, a blank screen is seen again to enter the number of the entry. Storing operation is completed by pressing the ‘Enter’ key again.
- The display cursor enables data entry, when typing letters on the display is required (name or permanent message.) Until the letter to be typed appears on the display, the corresponding key is repeatedly pressed without any break. In order to type the next letter, corresponding key of that letter is pressed as many times as necessary. If two letters that will be typed consecutively are on the same key, then it takes two seconds for the cursor to move to the next digit after the first letter is typed.
- If any programmable key is pressed when the letter entry is being made with capital letters, the entry starts to be made by small letters. By the same way, if any programmable key is pressed again, small letters turn into the capital letters. If the small letters are started to use the “^” is displayed on the right side of the screen.
- Upon pressing the “Enter” key without entering any letter/number or after deleting all the letters/numbers on the display, the error message “Enter a correct name/number.” is displayed.
- In the event that any information of call, talking, Missed Call, hold, park or forwarding that is related to a number stored in the phone book is received, the name corresponding to that information is displayed. Maximum 16 characters can be displayed on the screen.

SYSTEM SETTINGS

Only the system supervisor is authorized to use this menu. That is, this menu is displayed only on FTs that are employed as the operator telephone and some special operations can be carried out via this upper menu option.

Submenu titles:

- **Setting Time**
 - Time=
- **Setting Date**
 - DD/MM/YY=
- **Night Mode**
 - Enable/Disable?
- **Common Pool**
 - Register No=/ No=
- **ACD**
 - Enable/Disable?
- **Parallel Operator**
 - Enable/Disable?

Setting Time

- ◆ **HH:MM=:** In this menu, the display cursor enables data entry and the user is required to enter the system time in 24-hour format. As soon as the user enters the hour, the character “:” automatically appears on the display and the user is expected to enter the minute.

Setting Date

- ◆ **DD/MM/YY=:** In this menu, the display cursor enables data entry. As the user enters the day and the month, the character “/” automatically appears on the display.

Night Mode

- ◆ **Enable:** The exchange is taken into the night mode.
- ◆ **Disable:** The exchange is taken out of the night mode.

Common Pool Entry

- ♦ In the **Register no** section, FT15 primarily prompts the operator for the common pool number. Then the operator enters it. That number should be of 2 digits in the range 0-99 for FT15. The number does not need to start with line access code.
- ♦ **No:** It prompts the operator for the number to be stored in the common pool.

ACD

- ♦ **Enable:** ACD is put on line.
- ♦ **Disable:** ACD is put off line.

Parallel Operator

- ♦ **Enable:** Parallel operator is put on line.
- ♦ **Disable:** Parallel operator is put off line.

APPENDIX

Error Messages

- 1) In case the user starts to enter an incorrect access code, s/he can obtain [Error] information by entering a number that does not exist in the system, so that s/he could have the opportunity to enter the access code again after pressing the 'Enter' key.
- 2) The system takes no action for the keys pressed during display of the messages (Error message, Line back...) that resides on the display for a specific period of time. (After the "Clear" option is confirmed by using the 'Enter' key, any process can be done.
- 3) In the event that an incorrect operation is done while in the programming mode, the error message is displayed for one second. The user receives erroneous action tone from the handset during that period. No key pressed in the meantime is detected and the telephone returns to the upper menu after the error display is over.
- 4) Whenever you see the SERIAL ERROR message, this indicates that your telephone can not communicate with the exchange. In that case, the upper group keys and special keys of your telephone do not work. In such cases call your authorized reseller.

