T A B L E   O F   C O N T E N T S

PROGRAMMING SECTION

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# PART 1. INTRODUCTION TO PROGRAMMING

1.1 PROGRAMMING OVERVIEW

The OfficeServ 7400 system arrives from the factory with default data. Connect it to trunks, stations and power, turn the system on and it is fully operational. The only thing left to do is customize the data to fit the customer's needs. This is called programming the system.

MMC stands for Man Machine Code and each program is assigned a different three digit code. These MMC codes are used to view, create or change customer data. Programming is simply deciding what needs to be done and knowing which MMC is used to do it. For example, use MMC 601 to create a station group. System speed dial numbers are entered in MMC 705 and soft keys are assigned to individual keysets using MMC 722.

System programming may be done from any two line display keyset. The first thing you must do is open system programming. As a security measure, a passcode must be known to do this.
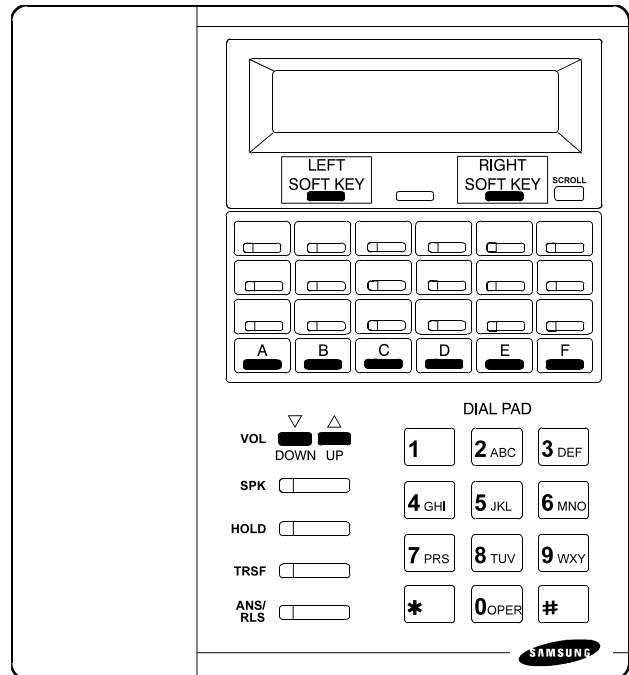
- ### iDCS KEYSETS

This diagram illustrates the keys on **a iDCS 28 BUTTON and a iDCS 18 BUTTON keyset** that have special functions during programming. When required, these keys will be referred to by the names described in the diagram.
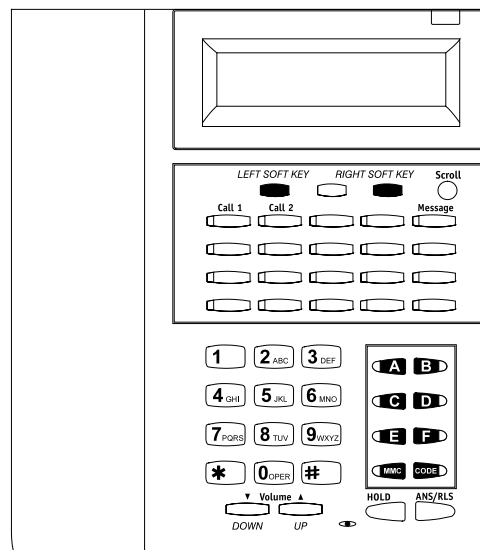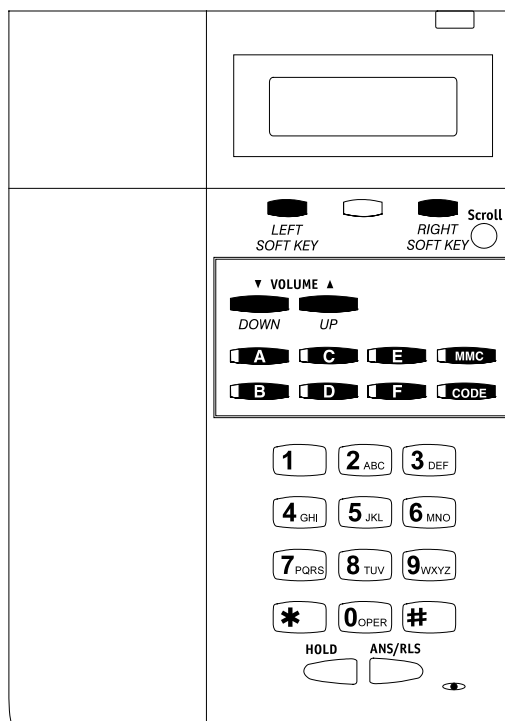
This diagram illustrates the keys on a **iDCS 8 BUTTON keyset** that have special functions during programming. When required, these keys will be referred to by the names described in the diagram.
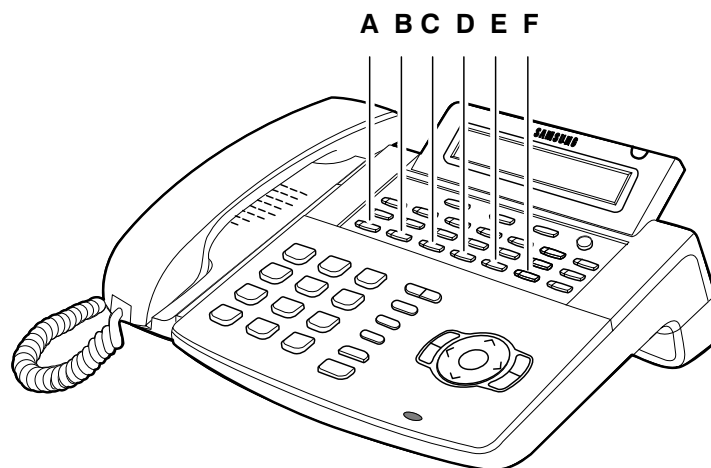
- ## DCS KEYSETS

This diagram illustrates the keys on a display keyset that have special functions during programming. When required, these keys will be referred to by the names described in the diagram.

- ## ITP-5121D KEYSETS and DS 5000 Series KEYSETS

This diagram illustrates the keys on **ITP 5121-D, DS 5021D, DS 5014D and DS 5007S keysets** that have special functions during programming. When required, these keys will be referred to by the names described in the diagram.
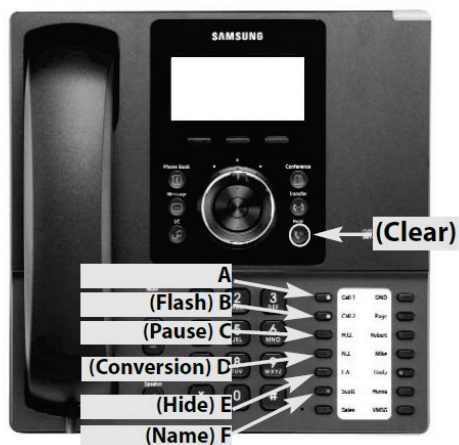
• SMT-i Series Keysets

SMT-i3105

SMT-i5210

SMT-i5220

SMT-i5230

SMT-i5243

1.2 PROGRAMMING LEVELS

There are three levels of programming: SYSTEM, CUSTOMER and STATION. System and customer levels are under passcode protection while station programming does not require a passcode.

To prevent conflicting data from being entered, only one person at a time can enter programming with the technician or customer passcode. While programming is in progress, normal system operation is not affected. For your convenience, the system displays [xxx IN PGM MODE] when another keyset is in the program mode.

A. System level

This level is entered via MMC 800 and requires the technician level passcode. It allows access to all system programs, station programs and maintenance programs.

B. Customer level

This level is entered via MMC 200 and requires the customer passcode. It allows access to station programs and system programs allowed by the technician in MMC 802. When using the customer passcode to access station programs, data for all stations can be viewed or changed.
NOTE: When the system is programmed for multiple tenant use, each tenant has an individual customer passcode enabled in MMC 201. The access for tenant passcode is limited to only certain MMCs. See MMC 201 for more details.

After opening programming with the customer passcode, you must press TRSF to exit. Now press TRSF and the MMC number you wish to access.

C. Station level

All keysets can access station programs 102–117 without using a passcode. Each user can only change station data for his/her own keyset.

When the LCD 24B keyset is in programming, the display shows instructions, prompts and choices. Existing data is always displayed before it can be changed. The keystroke sequence for each MMC is detailed in the following pages.

Before you begin entering customer data, follow this important reminder.

1.3 SYSTEM MEMORY MANAGEMENT

In **previous** OfficeServ Systems such as the OfficeServ 100, 500, and 7200, SRAM memory stored the active system database and Smart Media was where the Database was saved on a more permanent basis. The SRAM was battery-backed on the MCP card by a super-capacitor with a battery backup switch which could clear the memory and default the system. However, the memory architecture of the OfficeServ 7400 is considerably different.

The OS7400 has 4 types of memory:

1) **SRAM (2MB):** Holds information such as Call Logs, Alarms, UCD call stats, program logs and traffic reports. SRAM is backed by the Super Capacitor on the MP40. If the switch is ON, data can last up to 12 hours without main system power. <u>The SRAM DOES NOT STORE THE SYSTEM DATABASE.</u>

2) **DRAM**: This is where active system Database resides.   During WebMMC or KMMC programming, the data being programmed is written to DRAM.

   DRAM IS CLEARED WHEN SYSTEM BOOTS. During system boot up, the latest NAND FLASH contents are reloaded into DRAM.

3) **NAND FLASH**: A more permanent memory that will hold the system database for many years. During WebMMC or KMMC programming, the data being programmed is written to DRAM. The database will be written from DRAM to NAND FLASH upon the following conditions:
   - 5 minutes after a system boot
   - From that point every 15 minutes
   - When you log out of WebMMC or KMMC (mmc 800 disable)
   - When KMMC or WebMMC lockout timer expires
   - MMC 811 restart

4) **SMART MEDIA (32MB):** When you use MMC 815 and save the Database to Smart Media, it copies the active Database from DRAM and saves it to Smart Media. This way the most up-to-date database is saved to Smart media.

   WHAT THIS MEANS TO YOU?
   From the information described above, you can see that if you made a programming change in KMMC and pressed the right soft key to save, the change is made immediately to DRAM and the change takes effect immediately. Likewise, if you make a programming change using WebMMC and click the SAVE button, the change is effective immediately and is saved to DRAM active system database. However, once the change is saved in DRAM, if the system reboots before one of the events listed in item 3 above occurs, then you will lose the changes you just made. This is because the changes never got a chance

to write from DRAM to NAND FLASH. NAND FLASH is what is loaded into the DRAM when the system boots back up.

Thus it is highly recommended that you frequently log out of KMMC or WebMMC programming to force the DRAM to save to NAND FLASH.

1.4 DEFAULTING THE SYSTEM

You can no longer default the system by turning the MP40 battery backup switch OFF then ON again. Turning the battery backup switch OF then ON again will simply clear the SRAM which contains the data mentioned above. You can default the OS7400 in the following ways:

1) MMC 811 MEMORY CLEAR (however mmc 830 IP address information will be retained).
2) Leave the MP40 battery backup switch in the OFF position and boot the system. This is a FULL default. You will have to power down and turn the battery back up switch back ON and reboot.
3) When the Country Selection is changed by MMC 812 or the MP40 DIP SWITCHES

IMPORTANT REMINDER

When first installing this system, always use MMC 811 to reset and clear memory. This will ensure that you begin with clean default data.

Now begin entering customer data

PART 2. OFFICESERV 7000 SERIES COMMON PROGRAMMING

The MMC list is now common to all OfficeServ 7000 Series system.

Click here to go to the MMC list.

NOTE: When ordering a printed copy from Fedex Office please order the OfficeServ 7400 Technical Manual and the "OfficeServ 7000 Series Common Programming" manual for a complete list of all MMCs.