

28i/124i PC Program

User Guide

Part No. 92601PCP04 Issue 1-0, May 2001 Printed in U.S.A. (183) 5.03/5.03 This manual has been developed by NEC America. It is intended for the use of its customers and service personnel, and should be read in its entirety before attempting to install or program the system. Any comments or suggestions for improving this manual would be appreciated. Forward your remarks to:

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The 28i and 124i and their associated PC programming are unaffected by the date change to year 2000. The systems process the Leap Year correctly and do not require any additional upgrades or reprogramming. All versions of the 28i use a four-digit date code entry. The 124i prior to Base/EXCPRU software 4.04 uses a two digit date code entry (e.g. 00=2000). Base/EXCPRU software levels 4.04 and above use a four digit date code entry (e.g. 2000).

PC Program User Guide

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Set Up Your Modem
Go to RS-232C Mode on page 53.

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Go to Communication Menu on page 31.

PC Program Menu Structure



!! IMPORTANT !!

If you're system software is currently Commonized 6.00.01 or higher, you must use PC Program version 5.00 or higher (see below).

OR

If you're upgrading from software 5.XX or below to 6.xx, make sure you follow the instructions below!!

When using Commonized system software 6.00.01 or higher on the 28i or 124i systems, the PC Program version must be 5.00 or higher. Due to data differences between the versions of software, the commonized software (6.00.01) cannot be used with previous versions of the PC Programs. These new programs store the database information under new files names to help ensure that you do not use the previous system files. The 28i and 124i PC Programs previously stored the database in a file 'xxxxxx.ina' - the new program uses 'xxxxxx.ena' as the file name.

The following steps must be used when converting your system software and PC Program to the new commonized versions.

Upload/Download Instructions:

 Using the current version of the PC Program and system software, use the ME-PC command to upload the customer database and then save the file.

> This is a precautionary step, just in case you need to revert to the previous software.

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2. Record the entries that are programmed in **Program 1001 - Basic Extension Port Setup (Part A)** and **Program 1810 - DID Intercept Options**.

This information will not be transferred to the new program and must be reentered later in the installation process.

- 3. Install the new PC Program into your computer.
- 4. Prior to installing the 6.00.01 system software, upload the customer database to the new PC Program and save the file.

During the upload process, you will receive warning messages advising you of conflicts. These messages are caused by program and database differences. Simply click 'I' to ignore the messages and let the upload process proceed.

- 5. Once the upload process is complete, save the file within the PC Program.
- 6. Terminate the connection between the PC Program and the telephone system.
- 7. Update the telephone's system software with version 6.00.01 or higher.

Installing the new system software will initialize your telephone system.

8. Using a telephone to enter system programming, use Program 0004 to update all the circuit types within the system.

When uploading data from the 28i/124i system in Step 4, the port and PCB slot information from Program 0091 will not load so the system must reidentify the circuits.

- 9. Enter Program 1001. Using the entries recorded in Step 2, reprogram all items as required.
- 10. Save your changes and exit system programming.
- 11. Re-establish communications between the system and the PC Program.

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- 12. Open the customer's saved database file in the PC Program.
- 13. Under the Communication's ME -> PC option, use the Selected Programs option to choose **Program 0005 Extension Circuit Type**. Upload this program to the PC Program.

The system will automatically upload Program 1001 as well.

14. Once the upload is complete, save the customer's database file once again.

Once the system software and PC Programs have been upgraded and your customer information has been converted, you can upload or download the programming using the normal process.

15. Download the PC Program file to the system in order to reprogram the system with the customer's information.

Note: If you're using voice mail, depending on your system, you may need to reprogram. The 28i or 124i systems used Program 1017 - Voice Mail Port Assignment. With this new system software, **Program 1003 - Extension (Department) Group** and **Program 0410 - Extension (Department) Group Options, Item 3: Voice Mail Group** are used instead allowing for up to 48 voice mail ports. Refer to the Voice Mail feature in the i-Series Software Manual, P/N 92600SWGxx, for further information.

With the new 6.00.01 software and higher, DID Intercept is handled differently and must be reprogrammed in **Program 1810 - DID Intercept Options**. Refer to the i-Series Release Notes, P/N 92600RNT01, for further information.

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- For Your Notes -

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Introduction

The PC Program is a PC-based off-line application that allows you to:

- Edit the telephone system programming options.
- Save your programming to your PC's hard disk then upload it via modem or direct connection to the telephone system.
- Download the existing programming in the telephone system via modem or direct connection — and save it to your PC's hard disk.
- Set up a default database with the settings you use most often.
- Access system maintenance functions like reports and tests.

You can also use the PC Program to create a unique database for each phone system you have installed. Since you save the site-specific data to your PC's hard disk, you can easily retrieve a customer's programming if something goes wrong.

As this manual covers both the 28i and 124i systems, the screens may be slightly different than what is shown, depending on the system you're programming.

System Requirements

- 386 or higher IBM PC compatible
- EGA or better monitor
- DOS 3.1 or higher operating system
- 3 Mbyte of free disk space on the target disk drive for program and temporary files
- At least 540K of free low DOS memory
- Run directly from DOS, with no other programs running in the background.

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Remote Communications Requirements

- 124i: Modem Kit (P/N 92066A) for each remote telephone system.¹ 28i: LAPB Programming Module (P/N 92706), LAPB DIN Connector-to-RS-232 Cable (P/N 92707), 28i PC Programming Software (P/N 92796).
- DCI (P/N 92266B) or 3DCI-A (P/N 92258) for each remote telephone system.
- Industry standard modem for your own PC.
- ¹ Complete installation instructions are provided with each modem kit.

Installing the PC Program

To install the PC Program on your hard disk:

- 1. Insert the PC Program installation disk into your 3 1/2" floppy drive.
- 2. Type **A:** and press **Enter**.

If your 3 1/2" floppy drive uses another drive letter (such as B), type **B**: instead.

3. Type INSTALL [destination] and press Enter. You see:

The [destination] is the target directory on your PC's hard drive. The installation program will create a **28i** or **124i** directory for the PC Program files **beneath** the destination you enter. The directory name will also include of the program's version number.

For example, if you type **INSTALL C:**, your PC Program will automatically install in directory C:\28ixxx or C:\124ixxx.

4. While the installation is in progress, you see:

```
Creating 1241 Directory
Checking new directory
Loading files from disk
```

The install program automatically creates the directories you need. If the destination directory already exists, you see: "Directory already exists". The installation program proceeds anyway.

5. When the installation program successfully completes, you see:

```
124: Installation was been successfully completed or use with the 124: system only. Do not use with 384: system
This 1241 program must be run under DOS with no other programs running in the background.
To run the program:

1. go to the drive where 1244 bas been installed by typing [drive]:
For example: C: (EMTER)

2. change to the directors where the programs are located:
Type:

3. type the name of the main propriet:
(the optional L after the file name is required for monochrome or LCD displays).

4. Refer to the name of or more details about the program operation.
```

Starting the PC Program

You must always start the PC program from the DOS prompt, with no other programs or applications running in the background. You should **not** run Windows; shell back to DOS and start the PC Program.

Note: When you see an instruction like **Print** ⇒ **Select items**, it means select *Print* from the Main Menu and then choose *Select* items. You'll see this convention often in this guide.

To start up the PC Program:

1. Log on to the drive on which the PC Program is installed. *In most installations, for example, you would type C: and* press the **Enter** key.

2. Change to the directory in which the PC Program is installed.

If you typed INSTALL C: to install, in this step you would type CD\28Ixxx or CD\124Ixxx and press the Enter key.

- 3. If you have a monochrome monitor:
 - On 28i: Type 28l L (or as indicated on screen during the installation) and press the Enter key.
 - On124i: Type **124l L** and press the **Enter** key.

If you have a color monitor:

- On 28i: Type 28l (or as indicated on screen during the installation) and press the Enter key.
- On124i:Type **124l** and press the **Enter** key.
- 4. The following screen appears requesting your password:



To quit the PC Program without entering your password, press Esc.

124i Renate Programming Terminal Ver 1.83

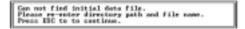
5. Type in your password and press the **Enter** key.

The default passwords are:

12345678 for Level 2 (IN—all Tenant Groups) 0000 for Level 3 (SA—Tenant Group 1 only) 9999 for Level 4 (SB—Tenant Group 2 only)

6. The PC Program opening screen appears. Go to *The Main Menu* on the following page.

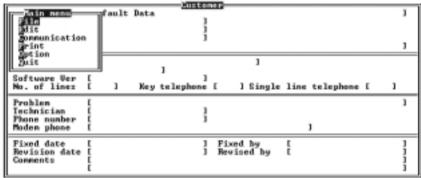
If you see the error message . . .



This indicates that you did not install the program on the "C" drive. By default, the program looks on the "C" drive to locate required files. Press ESC and enter the drive where you installed the program. For further information, turn to **Option** \Rightarrow **File** on page 51.

Understanding the Main Menu

After the PC Program loads, you see the Main Menu:



ESC:Display customer

The Main Menu is the top level menu that lets you choose options from the five sub-menus (shown below). To find out more on each sub-menu, turn to the section with the same name.

File Menu

The File Menu lets you display, load, save and delete customer data files. When you first start the PC Program, the default customer data file displays behind the Main Menu. Turn to the *File Menu* section for more.



From the Main Menu, you can press **Esc** any time to toggle between the Main Menu and the currently active Customer Information Screen. *This mode is for viewing only*. To edit the screen, turn to **File Customer** on page 14.

Edit Menu

Use the Edit Menu when you want to change the telephone system programming options. These are the same options as those available through the system telephone programming. Go to the *Edit Menu* section for more details on this sub-menu.

Communication Menu

The Communication Menu allows you to:

- Set up your modem
- Upload a database *from* a remote phone system
- Download a database to a remote phone system
- Quickly access select phone system commands

To learn more about the PC Program's remote communication capability, turn to the *Communication Menu* section.

Print Menu

When you need to print a database, go the the Print Menu. You can print an entire database or just selected items. Turn to the *Print Menu* section for more information on database printing.

Option Menu

The Option Menu lets you set general parameters for the PC Program. These parameters include:

- The location of the PC Program's files
- Your PC's RS-232C port and modem settings
- Important printer settings
- Other miscellaneous options

Quit

Select Quit when you want to exit the PC Program.

Moving Around in the Menus

To select an item from a menu:

For the option you want, type the numbers or letters that are in bold type. For example, type E to select Edit from the Main Menu. In certain menus, you can type a number to select an option rather than a name.

OR

1. Use the cursor keys to highlight the item you want and press **Enter**.

To back up to the previous menu:

1. Press Esc.

To choose an item from a table of selections:

- 1. Use the **Up Arrow** and **Down Arrow** keys to highlight the item you want to change.
- 2. Use the **Left Arrow** and **Right Arrow** keys to highlight the selection you want.

For some programs, the screen displays items for a single object, such as a trunk or extension. The object being programmed is shown at the top of the screen.

Examples of this type of screen are Program 0901 (for trunks) and Program 1006 (for extensions).

To change the object being programmed, press PAGE UP or PAGE DOWN. You can also press F6 and type the number of the object you wish to program.

To display the help pop-up screen:

1. Press **F1**. If help is available, you'll see a pop-up help screen (similar to the one below) describing additional options.



For more on the help screens, refer to the sections that follow.

To quit the PC Program:

- 1. Press ESC until the Main Menu appears.
- 2. While the Main Menu displays, type **Q**. OR
- While the Main Menu displays, highlight Quit and press Enter.

Main Menu Help

At the bottom of the Main Menu screen, you see:

ESC:Display customer data

Esc

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Press **Esc** any time while the Main Menu displays to go to the Customer Information Screen display.

Main Menu Help 92601PCP03

Understanding the File Menu

Use the File Menu when you want to display, load, save or delete customer data files. If you have a database of many sites, use the File Menu to manage your data. Store your customer's data in unique files, update the data to keep it current and delete customer data files you no longer need.

To access the File Menu:

- 1. From the Main Menu, type **F**. OR
- From the Main Menu, highlight File and press Enter. In either case, the File Menu Displays.



The File Menu displays on top of the currently loaded Customer Information screen. This screen shows important site and contact information about the currently loaded database file. To load a new database file (which will show a new Customer Information screen), refer to the *Read* option below.

The File Menu Options

The File Menu provides the following options:

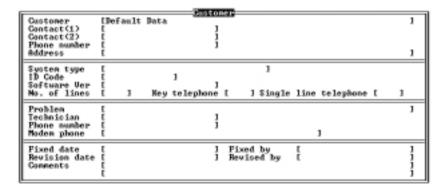
- Customer
- Display
- Read
- Save
- Delete

Customer

The Customer option lets you edit the currently displayed Customer Information Screen. (Remember, this is the screen displayed underneath the File Menu pop-up.)

To select the Customer option:

- 1. From the File Menu, type **C**. OR
- 1. From the File Menu, highlight **Customer** and press **Enter**. In either case, you see the full Customer Information Screen.



Note: If a telephone number is entered for "Modem Phone", that number can be dialed using the Auto Dial feature (F2) in the Communications Mode

To enter data in the Customer Information Screen:

- 1. Use the **Arrow** keys to select the field you want to edit. When you enter a customer's name in the Customer field, it always appears in the upper left corner of the PC Program screen.
- 2. Type in the data.
- 3. Press the **Arrow** keys to advance to the next field you want to edit. OR
- 3 Press **Enter** to advance to the next consecutive field

To return to the File Menu after editing the Customer Information screen:

Press Esc.

Display

When you want to view the list of your stored customer database files, use Display. Display can search any disks and directories on your system, not just the default PC Program directory.

> The PC Program automatically assigns the extension **INA** or ENA to the customer database files, depending on the software version of your PC Program.

To display the list of customer database files:

- 1. From the File Menu, type **D**. OR
- 1. From the File Menu, highlight **Display** and press **Enter**. In either case, you see the Directory Screen:

```
Directory ( c: )
```

The directory screen opens with the default directory displayed. This will originally be displayed as "C". If you installed on the "C" drive, just press ENTER to display a list of data files. Otherwise, follow the steps below.

To select the directory you want to display:

1. Type in the full DOS path for the directory that contains your customer database files.

Use the Left Arrow, Right Arrow and Delete keys to edit your entry.

2. Press Enter.

The database files for the directory you select display.

To return to the opening Display Screen and re-enter another directory, press F2.

To return to the Display Menu:

1. Press Esc.

Read

The Read option lets you load another database file, making it the current file and placing it in the Customer Information Screen. You can read a database file from any location on your PC's hard disk.

To read (load) another database file:

The file you load will become the current (active) database.

1. From the File Menu, type **R**.

OR

 From the File Menu, highlight Read and press Enter. In either case, you see:



ESC:To previous menu Enter:Read F2:Directory

Type in the path for the customer database you want and press Enter.

For example with the 28i system, type C:\28ixxx if your customer database files are on your C: drive in the 28ixxx directory.

Or with the 124i system, type C:\124ixxx if your customer database files are on your C: drive in the 124ixxx directory.

From the list of database files displayed, use the Up and Down Arrow keys to select the file you want. 4. Press Enter.

The Customer Information Screen for the database you select displays behind the File Menu.

To edit the displayed Customer Information Screen, go to the File ⇒ Customer option.

Save

The Save option lets you save the active customer database file to disk. This includes the Customer Information Screen as well as all the other programmable options.

To save the current (active) database file:

- 1. From the File Menu, type **S**. OR
- From the File Menu, highlight Save and press Enter. In either case, you see a screen similar to:



- 2. Using the **Up** and **Down Arrow** keys, go to the *Directory* line.
- Type in the directory where you want to store the customer's database.

Use the **Backspace** and **Delete** keys to edit the existing entry.

- 4. Using the **Up** and **Down Arrow** keys, go to the *File name* line.
- 5. Type in the name of the customer's database file and press **Enter**.

The file name can be up to eight letters long, using the standard DOS conventions. Do not enter an extension.

If you enter a database file name that already exists, you see:



Press Y to overwrite the exiting file, or N to cancel the save and return to step 2.

6. You return to the *File* menu.

Delete

Use Delete when you want to remove database files from your PC's hard disk

To delete a database file:

- 1. From the File Menu, type ${\sf E}$.
 - OR
- From the File Menu, highlight **Delete** and press **Enter**. In either case, you see:



ESC:To previous menu Enter:Delete F2:Directory

2. Type the directory in which the database file you want to delete resides and press **Enter**.

Use the **Backspace** and **Delete** keys to edit the existing entry.

3. Using the **Up** and **Down Arrow** keys, highlight the database file you want to delete and press **Enter**.

You can also press F2 to return to step 1.

You see:

c:I32NA.INA Are you sure ? Yes/<u>No</u>

- 4. Type Y to delete the selected file.
- 4. Type N to return to step 3 without deleting the file.
- 5. Press **F2** to return to step 1 OR
- 5. Press **Esc** to return to the File Menu.

File Menu Help

From the File Menu . . .

At the bottom of the screen, you see:

ESC:To main menu

Esc

Press **Esc** anytime to return to the Main Menu.

From the Customer Menu...

At the bottom of the Customer Menu, you see:

ESC:Cancel/Go to file menu

Esc

Press **Esc** anytime to return to the File Menu.

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From the Display Menu...

At the bottom of the screen, you see:

ESC:To previous menu F2:Directory

Esc

Press **Esc** anytime to back up to the File Menu.

F2

While the list of customer database files is displayed, press **F2** to go back to the Directory Screen.

From the Read Menu...

At the bottom of the screen, you see:

ESC:To previous menu Enter:Read F2:Directory

Esc

Press **Esc** anytime to back up to the File Menu.

Enter

Press **Enter** to display the list of customer database files. While the list of customer database files is displayed, press **Enter** to load (read) the highlighted file.

F2

While list of customer database files is displayed, press **F2** to go back to the Directory Screen.

From the Save Menu...

At the bottom of the screen, you see:

ESC:To previous menu Enter:Save

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Esc

Press **Esc** anytime to back up to the File Menu.

Enter

Press **Enter** to save the selected file.

From the Delete Menu...

At the bottom of the screen, you see:

ESC:To previous menu Enter:Delete F2:Directory

Esc

Press **Esc** anytime to back up to the File Menu.

Enter

Press **Enter** to display the list of customer database files. While the list of database files is displayed, press **Enter** to delete the highlighted file.

F2

While the list of customer database files is displayed, press **F2** to go back to the Directory Screen

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Understanding the Edit Menu

The Edit Menu gives you full access to the telephone system programming. This gives you several important options when configuring a system. You can:

- Set up a remote system's programming in your office, and then download it locally or over a modem. This saves you valuable onsite programming time.
- Upload a remote system's programming, modify it in your office, and send the new configuration locally or via modem. This minimizes the disruption to the site, in addition to giving you a complete database of the site programming.
- Periodically upload a remote system's programming and keep it in your office as a backup.

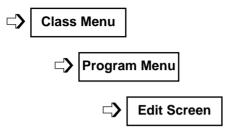
To access the Edit Menu:

- 1. From the Main Menu, type **E**. OR
- 1. From the Main Menu, highlight **Edit** and press **Enter**. In either case, you see:



The Edit Menu Options

The Edit menu uses a three-tiered sub-menu format:



Class Menu

The Class menu allows you to select the programming series you want to customize. For example, to select the 0500 - System Numbering series:

1. In the Class Menu, select **05 System Numbering**. To select System Numbering, type **05**, or highlight **05** System Numbering and press Enter.



2. Go to the *Program Menu* on the next page.

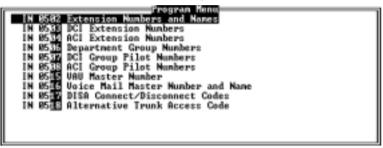
Refer to the Software Manual for more information on each programming series.

Program Menu

A subset of the Class Menu, the Program Menu lets you select the program you want to customize. To select *Program 0502 - Extension Numbers and Names*, for example:

 In the Program Menu, select 0502 - Extension Numbers and Names.

To select 0502, type 02, or highlight 0502 - Extension Numbers and Names and press Enter.



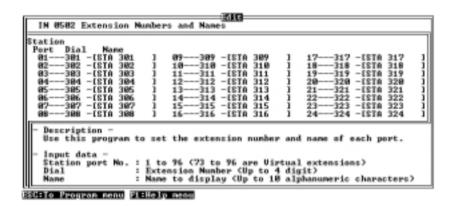
2. Go to the Edit Menu on the next page.

Note: The letters to the left of the Program Menu option indicate the password access level.

Edit Screen

Use the Edit Screen to enter data for the program you select in the Class Menu. To edit *Program 0502 - Extension Numbers and Name*, for example:

1. With 0502 - Extension Numbers and Names highlighted in the Item Menu, press **Enter**. You see:



2. Change the data as required.

The window below the Edit Screen gives you additional information about the option you are programming. If you need more help, refer to the Software Manual.

Edit Menu Help

From the Class Menu...

At the bottom of the screen, you see:

ESC:To previous menu Enter:Program menu

Esc

Press **Esc** anytime to return to the Main Menu.

Enter

Press **Enter** to select a program series and go to its Program Menu.

From the Program Menu...

At the bottom of the Program Menu, you see:

ESC:To class menu Enter:To edit

Esc

Press **Esc** anytime to return to the Class Menu.

Enter

Press **Enter** to select an item and go to its Edit Screen.

F1

Press **F1** anytime to display the Program Menu help screen:

Program menu help—
ENTER : Select
ESC : To previous screen
Pg UP : Next page
Pg DOWN : Previous page
F5 : Clear edit mark

Enter Advances to the Edit Menu.
Esc Backs up to the Class Menu.

Pg UP Scrolls down to the next page in the Program Menu

(if available).

Pg DOWN Scrolls down to the previous page in the Program

Menu (if available).

F5 Clears the edit mark (#) to the left of the selected

program. This prevents the PC Program from downloading the program change when you do a **PC->ME**

⇒ **All Edited Items** from the Communication

Menu.

From the Edit Screen . . .

At the bottom of the Edit Screen, you see:

ESC:To Program menu F1:Help menu

Esc

Press **Esc** anytime to return to the Program Menu.

F1

Press **F1** to display the Edit Screen help:

```
Help on editing
ESC
        : Exit (backup)
Pa UP
        : Next page
        : Previous page
Pg DOWN
TĀB
          Move right
HOME
          Top of data
F3
          Search port
F4
         : Сору
F6
        : GOTO page
F7
         : Reference
F8
         Input Help
F9
        : UNDO Change
        : View Appendix
F10
```

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Esc Back Up

Stores your changes in the database file and backs up to the Program Menu. If the PC Program detects an entry error, it will beep and highlight the error.

Correct the entry and press **Esc** again.

Shift F1 Backs up to the Program Menu without saving any

changes or checking for errors. This is a useful tool

if you suspect that the database is corrupt.

Pg UP Next Page

Jumps to the next object in the option (if available).

Pg DOWN Previous Page

Jumps to the previous object in the option (if

available).

TAB Next Column

Moves the cursor right to the next column in the Edit Screen. Tab is a convenient way to move quickly through data. It's faster than using the Up or Down

keys.

Shift TAB Previous Column

Moves the cursor back to the previous column in the

Edit Screen

HOME Top of Page

Returns cursor to the first data entry field.

F3 Extension/Port Checker

Quickly correlate extension number to extension port. For example, press **F3**, enter **350** and the

screen will show port **50**.

F4 Copy

Copy the current selection to a range of extension or

trunk ports.

F6 Goto

Jumps to another object so you can jump (e.g., go to another port) without repeatedly pressing Pg Up or Pg Dn. After pressing F6, type the number of the

port (object) to go to and press ENTER.

F7 Reference

Pops up a Class Menu that you can view for reference. You can view (without editing) any Program or Edit Menu and then just press **Esc** to jump back to where

you started.

F8 Entry Data

Displays additional data entry information about the

active field.

F9 Undo

Restores the original entry for the active Edit Screen.

F10 Appendix

Takes you to the Appendix data. The Appendix provides additional technical data for certain options.

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Understanding the Communication Menu

Use the Communication Menu to set up communication with the telephone system and then upload or download the customer's database. The communication can be via modem or direct connection to a DCI or 3-DCI port. The Communication Menu also allows you to perform certain phone system maintenance functions.

To access the Communication Menu:

- 1. From the Main Menu, type **C**.
 - OR
- 1. From the Main Menu, highlight **Communication** and press **Enter**. In either case, you see the Com Menu:



The Communication Menu Options

The Communication Menu provides the following options:

- Modem Control
- Download to Phone System (PC ⇒ ME)
- Upload from Phone System (ME ⇒ PC)
- Maintenance Commands (O/M Command)

Modem Control

Modem Control allows the PC Program to emulate a "dumb" terminal for direct modem control. For example, you can connect your modem to your PC.

COMMUNICATION MENU

Optionally, you can connect your PC's serial port directly to a DCI or 3DCI port.

Refer to the instructions that came with your Modem Kit (P/N 92066A) or the system hardware manual (P/N 92601INSxx).

- 2. Set the PC Program communications parameters in the Option Menu for compatibility with the connected modem.
- 3. Use standard AT Command Set modem commands to control the modem and place calls (with the exception of the 28i and the ATDT command (see #2 in *To Activate Modem Control*).

To activate Modem Control:

- 1. From the Communication Menu, type **M**. OR
- 1. From the Communication Menu, highlight **Modem Control** and press **Enter**. In either case, you see the Modem Control Screen:

The bottom of the screen shows the available shortcut keys. Turn to Communication Menu Help for more.

Modem			
		7	
E0 1 1 2: 1		_	
E2: Auto Dial	F3: Password F4: Break F7: Modem Setup F9: Status	_	

2. Enter the AT command string.

- Type AT + Enter to see OK
- When connected locally to a DCI, type ATD #*#* + Enter to enter the programming mode.
- To call a remote system, type ATD + The remote system's modem telephone number + Enter

When communications is established with the system CPU, a connect message is displayed and you are prompted to enter a password. Type your password and press ENTER. (Remember you can use the Auto Dial feature to connect to a remote site.)

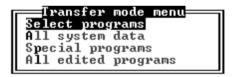
If an error message appears, press ESC to clear the message and try again.

PC ⇒ ME

The PC ⇒ ME Menu lets you download data from a customer database on your PC to a telephone system. You can download the entire database or just selected options.

To access the PC ⇒ ME Menu:

- 1. From the Communication Menu, type **P**. OR
- 1. From the Communication Menu, highlight **PC** ⇒ **ME** and press **Enter**. In either case, you see the Transfer Mode Menu:



To download just select database items:

1. From the Transfer Mode Menu, Type **S**.

OR

1. From the Transfer Mode Menu, highlight **Select Programs** and press **Enter**. In either case, you see the Class Menu.

The help at the bottom of the screen explains the shortcut keys.

In the displayed Class Menu, select the program series you want to download.

Refer to the Edit Menu section for help on selecting Class and Program Menu options.

3. In the displayed Program Menu, press **Enter** to mark each program you want to download.

An asterisk (*) displays to the left of each program series you select. To save time (particularly if downloading via modem), mark all your entries before going to the next step.

You can press F2 to select (mark) all programs in a class at one time.

Pressing F1 will display a help window which will detail the functions of all the F keys.

4. Press **F10** to download the data to the phone system.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

To download all system data:

All data does not include the Special Items below.

1. From the Transfer Mode Menu, Type A.

OR

1. From the Transfer Mode Menu, highlight **All System Data** and press **Enter**. In either case, you see:

Start communication ? les/No

- 2. Type **Y** to send the active customer database to the remote system.
- 2. Type **N** to return to step 1.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

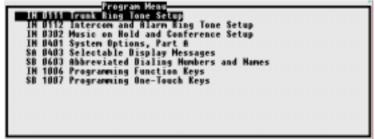
To download one of the Special Programs:

Since these are user-programmable items, take care before downloading them. You may inadvertently overwrite options that users have entered themselves.

1. From the Transfer Mode Menu, Type **P**.

OR

1. From the Transfer Mode Menu, highlight **Special Program** and press **Enter**. In either case, you see:



COMMUNICATION MENU

2. In the displayed Program Menu, select the program series you want to download.

The help at the bottom of the screen explains the shortcut keys. Refer to the Edit Menu section for help on selecting Program Menu options.

- In the displayed Program Menu, press Enter to mark each item you want to download.
- 4. Press **F10** to download the data to the phone system.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

To download just the edited (changed) items:

When in the Edit Menu, a pound (#) displays to the left of each program series you have edited.

1. From the Transfer Mode Menu, Type L.

OR

1. From the Transfer Mode Menu, highlight **All Edited Programs** and press **Enter**. In either case, you see:



- 2. Type \mathbf{Y} to send the edited items to the remote system. OR
- 2. Type **N** to return to step 1.

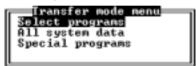
If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

ME ⇒ PC

The ME → PC Menu lets you upload data from a telephone system to a customer database in your PC. You can upload the entire database or just selected options.

To access the ME ⇒ PC Menu:

- 1. From the Communication Menu, type **E**. OR
- From the Communication Menu, highlight ME ⇒ PC and press Enter. In either case, you see the ME ⇒ PC Transfer Mode Menu:



To upload just select database items:

- 1. From the Transfer Mode Menu, Type **S**. OR
- 1. From the Transfer Mode Menu, highlight **Select Programs** and press **Enter**. In either case, you see the Class Menu.

Refer to the Edit Menu section for help on selecting Class and Program Menu options.

2. In the displayed Class Menu, select the program series you want to upload.

The help at the bottom of the screen explains the shortcut keys.

3. In the displayed Program Menu, press **Enter** to mark each program you want to upload.

COMMUNICATION MENU

An asterisk (*) displays to the left of each program series you select. To save time (particularly if uploading via modem), mark all your entries before going to the next step.

4. Press **F10** to upload the data to the phone system.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

To upload all system data:

1. From the Transfer Mode Menu, Type **A**. OR

1. From the Transfer Mode Menu, highlight **All System Data** and press **Enter**. In either case, you see:



- 2. Type \boldsymbol{Y} to upload the active customer database from the remote system. \mbox{OR}
- 2. Type **N** to return to step 1.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

To upload one of the Special Programs:

Since these are user-programmable items, take care before uploading them. You may inadvertently overwrite options that users have entered themselves.

- 1. From the Transfer Mode Menu, Type **P**. OR
- 1. From the Transfer Mode Menu, highlight **Special Item** and press **Enter**. In either case, you see:



In the displayed Program Menu, select the program series you want to upload.

> The help at the bottom of the screen explains the shortcut keys. Refer to the Edit Menu section for help on selecting Program Menu options.

- 3. In the displayed Program Menu, press **Enter** to mark each program you want to upload.
- 4. Press **F10** to upload the data to the phone system.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

O/M Command

The O/M Command provides you with quick access to selected maintenance functions. With O/M, you can read system and alarm reports, remove or install PCBs, test circuits and save or load customer data.

To use the O/M Command option:

- 1. From the Communication Menu, type **O**. OR
- 1. From the Communication Menu, highlight **O/M Command** and

press **Enter**. In either case, you see the O/M Command Menu:

O/M Command 11 Warm restart 12 Cold restart 13 Read system information (CMD 0091) 14 Read alarm report (CMD 0092) 15 Delete alarm report (CMD 0008 item 4) 16 Initialize telephone Function keys 17 Initialize DCI S-registers (CMD 1206) 18 Initialize extension numbers and names (CMD 2002) 19 Initialize service codes (CMD 2003) 10 UAU reset (CMD 2201)

2. In the displayed O/M Menu, select the program you want.

Do not use Warm Restart and Cold Restart. They are for factory use only.

The help at the bottom of the screen explains the shortcut keys. Refer to Communication Menu Help for more.

3. Press **Enter** to execute (run) your selection.

If you see "The line was not connected", return to Modem Control on page 31 and set up communications with the phone system.

Communication Menu Help

From the Communication Menu...

At the bottom of the screen, you see:

ESC:To main menu F8:Modem

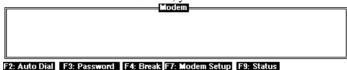
Esc Press **Esc** anytime to return to the Main Menu.

Press **F8** to jump to the Modem Screen.

F8

From the Modem Screen . . .

At the bottom of the Modem Screen, you see:



Auto Dial F2

> Press **F2** to automatically dial the number stored as the modem number in the Customer Information Screen.

Password F3

> Press F3 to reenter the password while still connection to the remote system. This saves you from breaking the connection and dialing again.

Break F4

Press **F4** to break (tear down) the modem connection.

Modem Setup F7

> Pressing **F7** opens a window which allows you to temporarily change the modem interface parameters and modem initialization string. To permanently change these parameters, refer to **Option** ⇒ RS232C Mode

Modem Status

Press **F9** to check the status of the RS-232C control leads

F9

From the PC ⇒ ME Transfer Mode, ME ⇒ PC Transfer Mode and O/M Command Menus . . .

At the bottom of the screen, you see:

ESC:To COM menu Enter:Execute F8:Moden

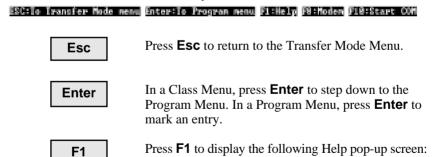
Esc Press **Esc** to return to the Communications Menu.

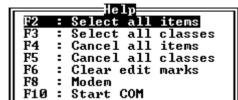
In a Transfer Mode Menu, press **Enter** to select the highlighted item. In the O/M Command Menu, press **Enter** to execute an item

F8 Press **F8** to jump to the Modem Screen.

From the Class and Program Menus . . .

At the bottom of the screen, you see:





- F2 Selects (marks) all programs for the selected class.
- F3 Selects (marks) *all* programs for *all* classes.
- F4 Deselects (unmarks) all programs for the selected class
- F5 Deselects (unmarks) *all* programs for *all* classes.
- F6 Clears the edit mark (#) to the left of the selected program. This prevents downloading the program change when you do PC ⇒ ME ⇒ All **Edited Items**.
- Jumps to the Modem Screen.
- **F10** Starts the download to the phone system (if already connected).

Press **F8** to jump to the Modem Screen. F8

> Press **F10** to start the download to the phone system (if connected).

F10

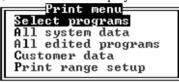
- For Your Notes -

Understanding the Print Menu

Use the Print Menu to print the active customer database to the parallel printer attached to your PC. You can print the entire database, only selected programs or just the Customer Information Screen. The printer you use should be compatible with the IBM extended ASCI character set.

To access the Print Menu:

- 1. From the Main Menu, type **P**. OR
- From the Main Menu, highlight Print and press Enter. In either case, the Print Menu displays:



The Print Menu Options

The Print Menu provides the options listed below. Before printing, make sure your print range is set in Print Range Setup on page 48. This will help you avoid lengthy, unnecessary or incomplete printouts.

Select Programs

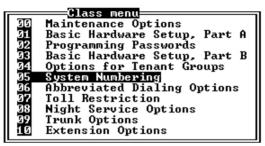
Use Select Programs to choose specific programs for printing. Select Programs lets you print out just the programs you have changed — instead of the entire database.

To select programs for printing:

1. From the Print Menu, type **S**. OR

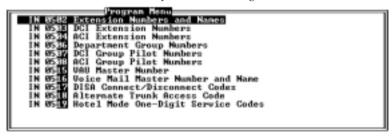
1. From the Print Menu, highlight **Select Programs** and press **Enter**. In either case, the Class Menu appears:

The following screen shows System Numbering highlighted. For more on the Class and Program Menus, refer to the Edit Menu section.



2. From the Class Menu, select the program series you want. You see the Program Menu for the selected Class:

The following screen shows the Program Menu of program series 0500 - System Numbering,



3. Press **Enter** (or type the Program number) to select the programs you want to print.

An ampersand (&) displays to the left of each program series you select.

4. Press **Esc** to back up to the Class Menu to select additional programs. OR

4. Press **F10** to print the currently selected programs.

To stop the printing, press Esc.

The PC Program will alert you if your printer is not connected or functioning properly.

All System Data

The All System Data option allows you to print all data in a customer database.

To print all the system data:

1. From the Print Menu, press **A**. OR

1. From the Print Menu, highlight All System Data and press Enter.

In either case, the system database prints. To stop the printing, press **Esc**.

The PC Program will alert you if your printer is not connected or functioning properly.

All Edited Programs

The All Edited Programs option allows you to print only the programs that were marked as edited in a customer database.

To print all the edited programs:

1. From the Print Menu, press **L**. OR

 From the Print Menu, highlight All Edited Programs and press Enter.

In either case, the system database prints. To stop the printing, press Esc.

The PC Program will alert you if your printer is not connected or functioning properly.

Customer Data

To print the Customer Information Screen:

- 1. From the Print Menu, press **C**.
 - OR
- 1. From the Print Menu, highlight **Customer Data** and press **Enter**. *In either case, the Customer Information Screen data prints. To stop the printing, press Esc.*

The PC Program will alert you if your printer is not connected or functioning properly.

Print Range Setup

With Print Range Setup, you can print customer database information for a specified range, rather than all extensions. For example, you can print only certain Tenant Groups, extension ports or Extension (Department) Groups. This saves printing time by allowing you to more narrowly define the items you want to print. The Print Range Setup option works *in addition to* whatever other print options you have enabled. The ranges you select are saved along with the other data in the customer database.

To set a print range:

- 1. From the Print Menu, type **P**.
- From the Print Menu, highlight Print Range Setup and press Enter. In either case, you see:

```
### Print Pance Setup

| Common | Commo
```

- Using the Up and Down Arrow keys, select the print range you want to change.
- 3. Edit the selected print range:
 - **Left** and **Right Arrow** keys highlight the existing entries.
 - Type in the new range.
 - Use **Backspace** and **Delete** to edit your entries.
 - Press **F2** to reset the print ranges to their default values.

 New range settings will be saved when the customer database

New range settings will be saved when the customer database is saved.

4. Press **Esc** to return to the Print Menu.

Print Menu Help

From the Print Menu...

At the bottom of the screen, you see:

ESC:To main menu F7:Form feed

Esc

Press **Esc** anytime to return to the Main Menu.

F7

Press **F7** to send a form feed to the printer. This advances the printer to the top of the next page

From the Select Programs Screen . . .

At the bottom of the Select Programs Screen, you see:

ESCITe print menu EnterITe item menu FliHelp menu P71Form feed F181Frint start

Esc

Press **Esc** to return to the Print Menu.

Enter

While in the Class Menu, press **Enter** to go to the selected program series Program Menu.

F1

Press **F1** to display the following Help pop-up screen:



- **F2** Selects (marks) all programs for the selected class.
- **F3** Selects (marks) *all* programs for *all* classes.
- **F4** Deselects (unmarks) all programs for the selected class.
- **F5** Deselects (unmarks) *all* programs for *all* classes.
- **F6** Deselects (unmarks) an edited class.
- **F7** Sends a form feed to the printer.
- **F10** Starts the printing for the selected programs.

F7

Press **F7** to send a form feed to the printer.

F10

Press **F10** to start the printing for the selected programs.

From the Print Range Setup Screen

At the bottom of the Print Range Setup Screen, you see:

F2:Initialize

Data will be saved by saving customer file in file menu.

F2

Press **F2** to reset all the Print Range fields to their default settings.

50 Print Menu Help

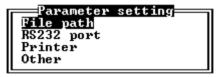
Understanding the Option Menu

Use the Option Menu to:

- Assign the path (location) of the PC Program's data and temporary working files.
- Determine the permanent RS-232C parameters for the PC's modem port.
- Set the page width and length options for the printer connected to the PC.
- Assign the format of the dates displayed in the PC Program and printout.
- Enable or disable the Invalid Access Level error message.

To access the Option Menu:

- 1. From the Main Menu, type **O**. OR
- 1. From the Main Menu, highlight **Option** and press **Enter**. In either case, you see the Option (Parameter Setting) Menu:



The Option Menu Options

The Option Menu provides the following options:

File Path

Use the File Path option to tell the PC Program where to find its program and temporary working files. Carefully setting this option is important, especially if you have many customer databases in different directories on the PC's hard disk.

To access the File Path option:

- 1. From the Option (Parameter Setting) Menu, type **F**. OR
- 1. From the Option (Parameter Setting) Menu, highlight **File** and press **Enter**. In either case, you see the File Screen:

Custom File Directory

Use Custom File Directory to indicate which directory the PC Program looks into for its database files. For example, when you do a **File** ⇒ **Read** command from the Main Menu, the PC program shows you the list of database files stored in the Custom File Directory.

Temporary File Directory

The Temporary File Directory option lets you specify where you want the PC Program to create its temporary working files. You can choose any directory on any of your hard drives as long as it has about 2 Mbyte of free space. When you exit the PC Program, it automatically removes the temporary files. You'll have to exit and restart the PC Program to have your entry take effect. If your PC has expanded or extended memory, you can speed up the PC Program by creating a virtual drive ("RAMDisk") for the temporary files.

Initial File Directory

The Initial File Directory entry tells the PC Program where to look for the database file it loads on initial startup. Your entry should be the directory for the file listed in the Initial File Name option. When you first start the PC Program, it tries to load the file programmed here. The default for the

28i system is C:\28Ixxx\I28NA.INA or C:\28Ixxx\I28NA.ENA. The default for the 124i system is C:\124Ixxx\I32NA.INA or C:\124Ixxx\I32NA.ENA depending on your PC software version. Use the Initial File Directory option if your program is installed in a different directory, or if you want to use a different initial file.

Initial File Name

When you start the PC Program, it automatically loads the customer database file entered in the Initial File Name option. You might find it helpful to create a standard customer database and automatically load it each time through this option. You could then use the standard file as a baseline for your new installations.

To edit an entry in the File Screen:

- 1. In the File Screen, use the **Up** and **Down Arrows** to highlight the option you want to change.
- 2. Type in the entry you want.

Use the Left and Right Arrows, the Delete and Backspace keys to edit your entry.

3. Press **Enter** to go back to the Option (Parameter Setting Menu) and go to step 4.

OR

- 3. Use the **Up** and **Down Arrows** to highlight another File Screen option and go back to step 2.
- 4. Press **F2** to save your entries.

OR

4. Press **Esc** to go back to the Main Menu without saving.

RS-232C Port

The RS-232C Port option lets you change the following parameters for the serial port used by the PC Program.

Speed

This option sets the speed of the serial port the PC Program uses for communicating with the phone system. The speed of the serial port can be 300, 1200, 2400, 4800 or 9600 baud. Most modems can automatically detect the speed you select. If you have problems uploading and downloading files, consider lowering the port speed.

Length

Use this option to set the length of each data character. Currently, the length option is fixed at 8.

Parity

The Parity option determines the type of parity checking used for each data character during the serial communications. You should set this option at *None*.

Stop

Use the Stop option to set the number of stop bits sent for each data character during serial communications. You should set this option at 1.

Echo

The Echo option sets the status of the local echo on your PC. Normally, you should set this option to *Off.* However, if you need to do a lot of manual communication from the Modem Screen, you may want to temporarily change this option to *On*. This will ensure that the characters you type will display on your screen. (If you see double characters while typing in the Modem Screen, return this option to *Off.*)

COM Port

The COM Port option allows you to choose the COM port to which your modem is connected (COM 1, COM 2, COM 3, or COM 4). If you are working on a laptop with an integral pointer (like a track ball),

this setting will normally be 1. If you are working on a desktop PC with a serial mouse, this setting will normally be 2. Check the manuals that came with your computer to be sure which setting you need.

IRQ Number

Use this option to set the IRQ for the selected COM Port. Generally, the settings would be entered as follows: COM 1 uses IRQ 4, COM 2 uses IRQ 3, COM 3 uses IRQ 4, and COM 4 uses IRQ 3. Check the manuals that came with your computer to be sure which setting you need.

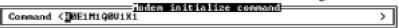
To access the RS-232C Port option:

- 1. From the Option (Parameter Setting) Menu, type **R**. OR
- 1. From the Option (Parameter Setting) Menu, highlight **RS232C Port** and press **Enter**. In either case, you see RS-232C Port Screen:



To edit an entry in the RS-232C Port Screen:

- In the File Screen, use the Up and Down Arrows to highlight the option you want to change.
- 2. Use the **Left** and **Right Arrows** to make your selection.
- 3. Press **Enter**. You see the Modem Initialization String screen:



4. Press **Enter** again. You return to the Option (Parameter Setting) Menu.

5. Press **F2** to save your entries.

OR

5. Press **Esc** to go back to the Main Menu without saving.

Printer Options

Use the Printer Options to set the length and width of the paper you are using for your printouts.

To access the Printer Options:

- 1. From the Option (Parameter Setting) Menu, type **P**. OR
- 1. From the Option (Parameter Setting) Menu, highlight **Printer** and press **Enter**. In either case, you see Printer Options Screen:

```
Max print width (080-132): 380
Max print length(050-100): 060
```

To edit an entry in the Printer Options Screen:

- 1. In the Printer Options Screen, use the **Up** and **Down Arrows** to highlight the option you want to change.
- 2. Type in the new entry.

For printing on an 8 1/2" x 11" sheet, set the print width to 80 and the page length to 60.

Use the Left and Right Arrow, Backspace and Delete keys to edit your entry.

- 3. Press Enter. You return to the Option (Parameter Setting) Menu.
- 4. Press **F2** to save your entries.

OR

4. Press **Esc** to go back to the Main Menu without saving.

Other Options

With the Other Options Menu, you can select the:

- Date Display Format
- Access Level Error Indication

Date Display Format

You can select the format the PC Program uses to display the date on printouts. There are two formats available: yy-mm-dd (e.g., 00-04-01 for April 1, 2000) and *mm-dd-yy* (e.g., 04-01-00 for April 1, 2000).

Access Level Error Indication

Use the Access Level Error Indication to remind you when you try and change an option your access level prevents. You can either disable (Non-Indicate) or enable (Indicate) this option.

To access the Other Options:

- 1. From the Option (Parameter Setting) Menu, type **O**. OR
- 1. From the Option (Parameter Setting) Menu, highlight **Other** and press **Enter**. In either case, you see Other Options Screen:



To edit an entry in the Other Options Screen:

- 1. In the Other Options Screen, use the **Up** and **Down Arrows** to highlight the option you want to change.
- 2. Use the **Left** and **Right Arrows** to change the entry.
- 3. Press **Enter**. You return to the Option (Parameter Setting) Menu.
- 4. Press **F2** to save your entries. OR
- 4. Press **Esc** to go back to the Main Menu without saving.

Option Menu Help

From the Option Menu...

At the bottom of the screen, you see:

ESC:To main menu F2:Store parameter

Esc

Press **Esc** anytime to return to the Main Menu.

F2

Press **F2** to save your Option Menu entries. After pressing **F2**, you see:

Save parameter? Yes/No

1. Press **Y** to save you entries.

1. Press **N** to return to the Option Menu without saving.

From any of the Option Menu options . . .

At the bottom of any of the option screens, you see:

ESC:Cancel Enter:Execute

Esc

Press **Esc** to exit the option (without changing) and return to the Option (Parameter Setting) Menu.

Enter

Mark your change and return to the Option (Parameter Setting) Menu.

You must still press F2 from the Option Menu to save your change.



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Other Important Telephone Numbers

Sales:	203-926-5450
Customer Service:	203-926-5444
Customer Service FAX:	203-926-5454
Technical Service:	203-925-8801
Discontinued Product Service:	900-990-2541
Technical Training:	203-926-5430
Emergency Technical Service (After Hours)	203-929-7920
(Excludes discontinued products)	



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