

**PNM**



*Compact Desk Guide*

**ELCOTEL INC.**

TELECOMMUNICATIONS SYSTEMS

# PNM

## Compact Desk Guide

Copyright © 1995 Elcotel, Inc.

All rights reserved. Unauthorized use of this guide is prohibited.

Elcotel, Inc., 6428 Parkland Drive,  
Sarasota, FL 34243  
USA  
Phone: (941) 758-0389 or (800) ELCOTEL  
Fax (941) 755-1085

### NOTICE

Elcotel, Inc. reserves the right to make any changes and improvements in the product described in this guide at any time and without notice.

Payphone Network Manager, PNM, PCM-5, Series 5, and Olympian 5501 are trademarks of Elcotel, Inc. All other product names are trademarks of their respective owners.

Third Edition  
July 1995

Printed in the USA



This document provides a brief "walk-through" of the steps you should follow to successfully download a phone. In order to become fully familiar with the many flexible features of PNM, the Series 5 payphone, and the Olympian 5501 payphone, the owner-operator is advised to consult the **PRODUCT MANUALS** and be trained on the latest features offered by Elcotel, Inc.

For Information or Assistance  
Contact  
**CUSTOMER SERVICE**  
**1-800-ELCOTEL**  
or  
**941-758-0389**

### DOCUMENT APPLICABILITY

**Payphone Network Manager (PNM) v. 2.2.1**

### OTHER RELATED DOCUMENTS

**5.3.X Registers and Options Settings**  
**Olympian 5501 Payphone Manual**  
**Series 5 Payphone Manual**  
**PNM Manual**

# TABLE OF CONTENTS

<u>Topic</u>	<u>Page</u>
<b>PNM Installation Procedure.....</b>	<b>1</b>
<b>Loading the Rate File.....</b>	<b>2</b>
<b>To View the Rate File.....</b>	<b>2</b>
<b>Create/Edit a Registers &amp; Options File for Downloading .....</b>	<b>3</b>
<b>Setting Up the Database Record.....</b>	<b>4</b>
<b>Viewing &amp; Editing a Database Record .....</b>	<b>5</b>
<b>Requirements Prior to Downloading.....</b>	<b>6</b>
<b>Downloading to a New Phone.....</b>	<b>8</b>
<b>Uploading Information from a Phone .....</b>	<b>9</b>
<b>Using PNM's F4 MORE Key .....</b>	<b>10</b>

# PNM INSTALLATION PROCEDURE

If Elcotel's payphone network manager (PNM) is not already installed on your computer, perform the following procedure for installing it on your hard drive. **You MUST use the INSTALL program in order to use PNM.** The files are archived and have to be decompressed in order to work properly. ***You cannot do this manually!***

The system should be "up and running" and with the hard disk drive selected (normally Drive C).

## FIRST TIME INSTALLATION

TYPE: **MD\PNM** <ENTER> Builds PNM Directory on your hard drive.  
TYPE: **CD\PNM** <ENTER> Changes to PNM Directory.  
PLACE: **PNM diskette "1" into Drive** (normally A or B).  
TYPE: **A:\ or B:\** (Drive containing diskette) <ENTER>  
TYPE: **INSTALL** <ENTER> Starts the Install program.

*The installation program will now "prompt" you through the rest of the procedure.*

## **When INSTALLation is complete:**

TYPE: **PNM**<ENTER> to run PNM.

## UPDATING A PREVIOUS VERSION

### **WARNING!**

If you have any LOG, SMDR, or BILLING RECORDS to process, process them **BEFORE** Installing PNM.

NEXT: **Backup** CHAT.DAT and CHAT.OPT to a diskette.  
TYPE: **CD\PNM** <ENTER> Changes to PNM Directory.  
PLACE: **PNM diskette "1" into Drive** (normally A or B).  
TYPE: **A:\ or B:\** (Drive containing diskette) <ENTER>  
TYPE: **INSTALL** <ENTER> Starts the Install program.

*The Installation Program will now "prompt" you through the rest of the procedure.*

## **When INSTALLation is complete:**

TYPE: **PNM** <ENTER> to run PNM.

### **-NOTE-**

*If you want the INSTALL program to copy any Rate Files/Generic Files from other PNMs, you must be able to tell INSTALL the FULL MS/PC-DOS PATH.*

## LOADING THE RATE FILE

Ratecenter files should be obtained by downloading from the Elcotel On-Line Bulletin Board (EOL) as described in the *Elcotel On-Line Bulletin Board System (BBS) User Guide, Volume 1 - Downloading Ratecenter Files*. Ratecenter files are ordered based on the NPA-NXX of the payphone(s) in which they will be installed.

The EOL BBS user guide provides instructions for installing downloaded ratecenter files onto your PNM computer.

## TO VIEW THE RATE FILE

*From the PNM MENU screen:*

1. SELECT: "5" (Phone Configuration)
  2. SELECT: "1" (Phone Configuration Editor)
  3. SELECT: "A" (Rates)
  4. HIGHLIGHT: (Rate File to be viewed/edited) <ENTER>  
(Displays options available to you for viewing/editing different sections of the Rate File.)
  5. PRESS: <ESC> key (This will return you to previous screen)
- OR**  
CONTINUE PRESSING: <ESC> to return to the PNM MENU screen.

### -NOTE-

*If changes have been made, PNM will prompt you to "Save Changes" as you "escape" out of this utility.*

## TO CREATE OR EDIT A REGISTERS/OPTIONS FILE TO BE DOWNLOADED TO THE PHONE

*From the PNM MENU screen:*

1. SELECT: "5" (Phone Configuration)
2. SELECT: "1" (Phone Configuration Editor)
3. SELECT: "R" (Registers and Options)
4. HIGHLIGHT: "One" of the DEFAULT.ROF files provided  
(DEFAULT.C94 for 5.3.0 and up software)

### -NOTE-

*The DEFAULT.ROF (or DEFAULT.C94) file that you select should be based on the software of the Series 5/5501 phone to be downloaded.*

*Example: Payphone Version 5.2.5.      Select: DEF\_525.ROF  
Payphone Version 5.3.0      Select: DEF\_530.C94*

5. SELECT: "C" (Create) This will create a new file from the default file and will prompt you to assign a file name up to 8 characters long.
6. TYPE: <Filename without extension> <ENTER>
7. TYPE: <Description of file or leave blank> <ENTER>
8. TYPE: "N" (to exit the Expert Editor)
9. HIGHLIGHT: File just created.
10. PRESS: "E" to edit.
11. SELECT: "R" (Registers and Options)
12. SELECT: Desired category by 1) pressing the highlighted letter, **OR** 2) pressing <ENTER> to start on Pg 1.

### -NOTE-

*Enter the appropriate information in each field. Use the <Page Up/Page Down> keys to continue to the next category, or <ESC> to return to the category Selection Table. Refer to the bottom of the screen for **HELP** on each field.*

13. PRESS: <ESC> after completing all desired categories until you are prompted to "Save" the entire file. <ENTER> to return and save file.

*At this point you can create Priority Parsing and/or Speed Dial Files, or Press <ESC> again to return to the PNM MENU.*

## SETTING UP THE DATABASE RECORD

From the PNM MENU screen:

1. SELECT: "1" (Communications/Database)
2. SELECT: "F3" (Menu)
3. SELECT: "3" (Database)
4. SELECT: "3" (Add phones to list)
5. ENTER: Payphone Version (i.e. R94-5 for Series 5/5501 phones) <ENTER>
6. ENTER: Information pertinent to this phone:
  - a. Phone Number As PNM is to dial it. (i.e. 7 digits for local numbers 1+10 for long distance numbers)
  - b. ID Number 4 digit number
  - c. New ID Number Only use if you need to change the ID for a previously downloaded phone.
  - d. PNM Password 8 or less alphanumeric digits, case sensitive.
  - e. New Password See New ID.
  - f. Bypass Code 8 numeric digits used to enter the programming mode from the keypad via voice telemetry.
  - g. Address Address
  - h. Location Location (Displayed in "F4" SCAN Screen)
  - i. Date Date payphone was "installed."
  - j. 1+/O Auth Codes Only if 1+ or 0+ calls are routed to an OSP via 950 of 1800 access requiring an auth. code.
  - k. Time Zone Set to 0 (If phone is located in same time zone.)
  - l. Blind Period 0
  - m. Volume Control 2 (Handset volume 0-3; 3 is highest volume.)
  - n. Rate Module File Press "F8" (DIR) for a directory listing of Rate Files available to assign. Highlight the desired file. <ENTER>
  - o. Registers/Options Press "F8" (DIR) for a directory listing of available Registers/Options Files. Highlight the desired file. <ENTER>

## SETTING UP THE DATABASE RECORD Continued...

- p. Priority Parsing (OPTIONAL) Press "F8" (DIR) for a directory listing Priority Parsing files available to assign. Highlight the desired file. <ENTER> (If not using, select default file. <ENTER>.)
  - q. Speed Dial (OPTIONAL) Press "F8" (DIR) for a directory listing of speed dial files available to assign. Highlight the desired file. <ENTER> (If not using, select default file. <ENTER>.)
  - r. Program File (OPTIONAL) Only used to download software upgrades to the Series 5/5501. Press "F8" (DIR) for a directory listing program files available to assign. Highlight the desired file. <ENTER> (If not using, leave blank.)
  - s. Voice File For PAOF use only.
  7. SELECT: "F9" (SAVE) (The Database Record is now entered and saved.)
- PNM will ask if you would like to configure another payphone.  
Select either another series PCM phone or  
Press <ESC> to exit the adding feature
8. CONTINUE PRESSING: <ESC> to return to the REMOTE STATUS screen.
  9. ENTER: "F7" (EXIT) to return to the PNM MENU.

## VIEWING & EDITING A DATABASE RECORD

From the PNM MENU screen:

1. SELECT: "1" (Communications/Database)
2. SELECT: "F4" (SCAN)
3. HIGHLIGHT: The desired record. Use the arrow up/down or page up and page down keys if needed.
4. PRESS: <ENTER>

5. VIEW: The database record. To make changes, highlight the desired field, add any changes, and <ENTER>
6. SELECT: "F9" "SAVE" if changes were made.
7. PRESS: <ESC> twice to return to the Remote Status Screen.

## REQUIREMENTS PRIOR TO DOWNLOADING

### WARNING!

**THE METAL HOUSING MUST BE GROUNDED!**

FAILURE TO ESTABLISH A PROPER GROUND MAY RESULT IN AN ELECTRICAL SHOCK HAZARD, ELECTRONICS BOARD FAILURE, AND RADIO FREQUENCY INTERFACE.

WARRANTY IS VOID WITHOUT PROPER GROUNDING.

### CAUTION!

Whenever a lightning bolt strikes anywhere within a mile of a payphone, high voltage transients develop between any conductive material and ground. These transients can reach the payphone through the power lines or the telephone line and can destroy smart payphone electronics in a phone which has not been grounded! A grounding wire must be connected directly from a cold water pipe or grounding rod to the center terminal of the strip located on the bottom left side of the Lower Housing (labeled "G"). In addition, serious personal injury may result to the user of a payphone that has not properly grounded. It is the payphone owner's responsibility to consult an electrician, duly licensed in the location where the payphone is to be installed, for proper grounding and installation. **SEE SERIES 5/5501 INSTALLATION & OPERATIONS MANUAL FOR FURTHER INSTRUCTIONS ON GROUNDING.**

### ESD PROTECTION

Your Series5/5501 utilizes sensitive electronic components which can be damaged by Electro Static Discharge (ESD). Individuals handling the Series 5/5501 outside of its protective anti-static bag, **MUST** be grounded with an ESD approved wrist strap.

### PHONE LINE PREPARATION

"Exposed" phone line is neither passed through a metal conduit nor is it shielded by a grounded, braided cable. If there is twenty-five or more feet of exposed phone line between the interface box and the payphone, install a gas tube surge protector at the paystation. This surge protector is in addition to the surge protector provided by the Telco. Failure to install such a surge protector may result in an electrical shock hazard.

#### Returning the Phone to the Default State

This procedure should be done for all new phone installations and the Printed Circuit Board (PCB) should have a *fully-charged battery installed and a live phone line connected.*

#### Defaulting the Series 5 Board:

1. Verify the phone has been on hook for at least 5 seconds.
2. Place a jumper on pins 7 and 8 (*left two pins*) of J4 at top of aux board. NOTE: (Subsequent revision boards provide a push button switch to perform this step. Keep the button pressed until step 4.)
3. Go off hook for at least 5 seconds. (*Phone should "fire" its relays.*)
4. Disconnect shorting jumper.
5. Hang up receiver.
6. PC board will now be defaulted.

*If the relays do not fire, repeat steps 1-5.*

#### Defaulting the 5501 Board

1. Verify the phone has been on hook for at least 5 seconds.
2. Press the reset button. Keep button depressed, go off hook for 5 seconds. (*Phone should fire relays*)
3. Hang up
4. 5501 is now defaulted

#### **-NOTE-**

*Unlike the Series 5, the Olympian 5501 payphone will not fire the coin relay when the board is defaulted unless a coin is in the escrow hopper (a coin has been deposited).*

## DOWNLOADING FILES TO A NEW SERIES 5/5501 PHONE

From the PNM MENU screen:

1. SELECT: "1" (Communications/Database)
2. SELECT: "F4" (SCAN)
3. Highlight: (Phone to be downloaded.)
4. SELECT: "F6" (DIAL) (PNM will call the Series 5/5501 phone, and display the Remote Status information [alarms, cashbox totals, etc.])
5. SELECT: "F4" (MORE)

- |                         |  |
|-------------------------|--|
| 6. OPTIONAL SELECTIONS: | (Will only be listed in "F4" [MORE] screen if the file is assigned in the database record.)      |
| HIGHLIGHT:              | Dnld Program "FILENAME" <i>only if</i> downloading a NEW software version to the phone.          |
| HIGHLIGHT:              | Dnld Brand "FILENAME" <i>only if</i> using PAOF and a Custom Voice Brand File has been assigned. |

7. PRESS: <PAGE DOWN> and highlight "DOWNLOAD OPERATIONAL FILES" \*. <ENTER>

*This downloads the files previously assigned in the database record. After completing the download "F4" (MENU) screen will reappear.*

8. PRESS: <PAGE DOWN> and highlight BURN RAM IMAGE TO EEPROM <ENTER>
9. HIGHLIGHT: TERMINATE TRANSMISSION <ENTER> (The phone has now been downloaded.)
10. SELECT: "F7" (EXIT) (Returns to PNM MENU screen.)
11. MAKE TEST CALLS: ***It is strongly recommended that at least 2 calls be made for each call type.*** When making these calls, check for proper call pricing, call routing and anti-fraud (i.e. chain dialing/secondary dial tone, pocket dialers, wink, etc.)

\*If ERROR message; no rate module has been assigned, or no registers and options file has been assigned. Refer to pg. 4 and complete steps 6-n and 6-o.

## UPLOADING INFORMATION FROM THE PHONE

From the PNM MENU screen:

1. SELECT: "1" (Communications/Database)
2. SELECT: "F4" (SCAN)
3. HIGHLIGHT: (Phone to be called.)
4. SELECT: "F6" (DIAL) (This will dial the phone, connect and display the Remote Status.)
5. SELECT: "F4" (MORE)
6. HIGHLIGHT: (The desired category) <ENTER>
7. HIGHLIGHT: TERMINATE TRANSMISSION <ENTER>
8. SELECT: "F7" (EXIT) (Returns to PNM MENU screen.)

## NOTES

## USING PNM'S F4 MORE Key

Entering "F4" (MORE) after you've established communication with a payphone, gives you access to a list of "things to do" during the communications session. In the Series 5/5501 phone, the DATA/REGISTER SELECTION includes these items:

### REMOTE STATUS

Displays the Series 5/5501 ALARM STATUS BLOCK at the moment communication is established with the phone.

### UPLOAD CALL COUNTERS

PNM retrieves Local, 0+, 1+, etc., call counters. These are stored in a file in PNM and can be viewed in the PRINT NETWORK REPORTS program after the call is terminated.

### UPLOAD SITE SPECIFIC BLOCK

This data is unique to each phone, including OSP/IXC auth. codes, volume control, blind period, PNM ID, and password. Upload data will be stored in the phone's database entry.

### UPLOAD RAM IMAGE

Allows PNM to upload the RAM image (i.e. Rates, Registers, Options, Priority Parsing, and Speed Dials). *The information can only be viewed through the NETWORK REPORTS option after the call is completed.*

### UPLOAD SMDR DATA

Retrieved the call details for analysis.

### CLEAR CALL COUNTERS

Clears call counters, and phone's Local 0+/1+ variables.

### CLEAR ALARMS

Clears all alarms, except Alarm 15 (SMDR 80% FULL) and Alarm 16 (SMDR Buffer Full).

### GET AND/OR SET DATE & TIME

Allows you to view or set the date and time programmed into the payphone.

"F5" - Edits date and time

"F6" - Downloads the date and time.

## USING PNM'S F4 MORE Key Continued...

### DOWNLOAD PROGRAM "FILENAME"

Downloads the operating system in a Program File (\*.PGM).

### DOWNLOAD VOICE BRAND "FILENAME"

Used in PAOF applications where a Custom Voice Brand File has been loaded into PNM and assigned to the Database record.

### DOWNLOAD OPERATIONAL FILES

Downloads the Rate Module File, Registers/Options File, Priority Parsing File, and the Speed Dial File.

### BURN RAM IMAGE TO EEPROM

Directs that the Rate Module File, Registers/Options File, Priority Parsing File, and the Speed Dial File currently in the phone's RAM be burned into the Electrically-Erasable Programmable Read Only Memory (EEPROM) chip.

### <<<RELOAD PHONE RAM>>>

Directs the data stored in the EEPROM chip to be loaded into RAM. This command is only needed with the phone's RAM is corrupted. This may be indicated by Alarm 10 (*No Rates*) or Alarm 17 (*Bad Registers and Options*).

### UPLOAD DIAGNOSTIC BLOCK

Retrieves data into PNM regarding events that happened during phone calls for diagnostic purposes. This information (*i.e. User dialed numbers, hook flashes, coin deposited*) can be viewed using NETWORK REPORTS after the upload is completed.

### RUN PROGRAM FROM ROM

Causes the phone to operate using the default program in ROM. This command should be used if the present Program File (\*.PGM) is not to be used.

## NOTES

## NEED HELP?

Contact Customer Service  
1-800-ELCOTEL  
or  
941-758-0389