LP Firmware Operation Manual

Version 5.4.2

Volume 2: Feature Set

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Volume 2: Feature Set

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

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Introduction

Audience Description

This manual is for persons who are responsible for installing, configuring, or maintaining Elcotel payphones that use LP 5.4 Firmware.

This manual assumes some knowledge of the payphone industry.

Applicability

This manual applies to the Elcotel, Inc. LP 5.4.2 Firmware.

Purpose

This manual is intended to provide:

- Reference information related to the configurable features of the payphone firmware.
- Reference information related to dialing macros.
- Reference information related to payphone maintenance mode commands.

You should refer to this manual as necessary when performing installation, configuration, or maintenance tasks.

Related Publications

- *LP Firmware Operation Manual,Version 5.4.2, Volume 1: Configuration,* P\N 3350373

This manual may refer to other related product manuals using a generic reference, such as “network management system manual,” “firmware operation manuals,” or “payphone operation manual.” The exact title and part number of these related manuals will vary, depending on the actual network management system, firmware, or payphone product purchased.

Contacting Elcotel

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1. FEATURE REGISTERS AND OPTIONS

The following are all of the configurable LP 5.4 registers and options contained in a registers and options template.

The registers and options are identified as relevant to Smart (S) and/or Hybrid (H) and/or Bright (B) modes of operation.

Operation mode is a feature of the Elcotel payphones with coin line capability, such as the Olympian 5501, and is controlled by register 453. **Bright** mode is for **coin line** installations and relies solely on the Central Office for call routing, rating, and answer supervision. **Hybrid** mode is for **coin line** installations and allows use of either the Central Office or the payphone capability for routing, rating, and answer supervision on a selective basis by call type. **Smart** mode is for **COCOT** (B-1) line installations and uses solely the routing, rating , and answer supervision capability of the payphone.

Elcotel payphones without coin line capability, such as the Series-5, must be connected to a **COCOT** (B-1) line and always operate as **Smart** payphones.

1.1 Registers and Options Listed Numerically

The **Mode** column identifies the register or option as relevant to the Bright (B) and/or Hybrid (H) and/or Smart (S) mode of operation. The **Page** column refers to the page number within the *Listed by Category* section where the register or option appears with additional information.

Table 1-1 Registers and Options Listed Numerically

Option/ Register	Title	Mode	Page
100	Enable Incoming Calls	B,H,S	**27**
101	Enable PBX Prefix When Dialing	S	**8**
102	Enable Wink Detect	S	**27**
103	Enable Card Reader	B,H,S	**8**
104	Enabab2(0)-E(S)]TJı˝/F9 1 Tfı˝37.1429 0 TDı˝0 Tcı˝02 Tfı˝-36.t -1.197V w N-10(4975TDı˝12(,Hı˝12(,ı˝		

Table 1-1 Registers and Options Listed Numerically (Continued)

Option/ Register	Title	Mode	Page
115	Enable Permissive Dialing with Registers 450 and 451	H,S	**57**
116	Enable Secondary Dial Tone Detect	H,S	**28**
117	Enable Customer Credit from Service Desk	H,S	**34**
118	Block Interstate 1+ Calls	H,S	**28**
119	Customer Proprietary Feature		**58**
120	Enable Credit Card Only Feature	H,S	**8**
121	Enable Collect Upon Answer Detect	H,S	**33**
123	Enable Payphone Extension Feature	H,S	**9**
124	Enable Dialing Digit “8” After a “0”	S	**32**
125	Enable Reverse-Battery Answer Supervision	S	**29**
126	Disable DTMF “#” After 0- Calls	S	**32**
128	Enable Anti-fraud for 911 Calls	S	**33**
130	Enable Rotary (Pulse) Dialing	B,H,S	**9**
131	Delete the “1” From All 1+ Calls	H,S	**19**
132	Customer Proprietary Feature		**58**
133	Disable Coin Relay Pre-charging	H,S	**9**
134	Do Not Correct User Dialing	H,S	**58**
140	Enable Timed Local Calls	H	**54**
141	Enable Reversed Coin Disposal	B,H	**54**
142	Disable Line Polarity Keypad Control	B,H	**54**
143	Customer Proprietary Feature		**58**
146	Customer Proprietary Feature		**19**
147	Use Enhanced Service Desk Command Set	H,S	**35**
164	Enable Elcotel Bong for 0+ Local Calls	H,S	**58**
165	Enable Elcotel Bong for 0+ IntraLATA Calls	H,S	**59**
166	Enable Elcotel Bong for 0+ InterLATA Calls	H,S	**59**
167	Enable Elcotel Bong for 0+ InterSTATE Calls	H,S	**59**
180	Charge for Incoming Call	B,H,S	**9**
181	Repeat Voice Prompts		**11**
185	Spare (Reject Keyed-in Visa Card)		**60**
200	0 Restricted call		**37**
201	1 Free Emergency (911) call		**37**
202	2 Incoming calls		**37**
203	3 Information call		**37**
204	4 Sent Paid Local calls		**37**

Table 1-1 Registers and Options Listed Numerically (Continued)

Table 1-1 Registers and Options Listed Numerically (Continued)

Option/ Register	Title	Mode	Page
250	50 0+ Commercial CC InterLATA		**47**
251	51 0+ Commercial CC InterSTATE		**48**
252	52 0+ Unidentified CC Local		**48**
253	53 0+ Unidentified CC IntraLATA		**48**
254	54 0+ Unidentified CC InterLATA		**49**
255	55 0+ Unidentified CC InterSTATE		**49**
270	70 0+ Unbillable from VDC		**49**
271	71 0+ No Credit Card - Corridor		**50**
272	72 0+ Bell Card - Corridor		**50**
273	73 0+ Commercial Credit Card - Corridor		**51**
274	74 0+ Unidentified Credit Card - Corridor		**51**
300	Macro Table #45		**52**
301	Macro Table #46		**52**
302	Macro Table #47		**52**
303	Macro Table #48		**52**
304	Macro Table #49		**52**
305	Macro Table #50		**52**
310	IXC 800 Access Number #1		**19**
313	IXC 800 Access Number #2		**19**
319	OSP 800 Access Number #1		**20**
322	OSP 800 Access Number #2		**20**
325	IXC 101XXXX Access Number #1		**19**
328	IXC 101XXXX Access Number #2		**19**
331	OSP 101XXXX Access Number #1		**20**
332	OSP 101XXXX Access Number #2		**20**
333	Primary Number Payphone Calls to Deliver Alarms	B,H,S	**13**
334	Secondary Number Payphone Calls to Deliver Alarms	B,H,S	**13**
335	Primary Number Payphone Calls to Deliver SMDR	B,H,S	**13**
336	Secondary Number Payphone Calls to Deliver SMDR	B,H,S	**13**
337	Number User Dials for Service Desk™	B,H,S	**34**
338	Number Payphone Dials for Service Desk	B,H,S	**34**
341	PBX Access Code	S	**8**
401	Cash Vault Collection Number	B,H,S	**13**
407	Times to Repeat "Not a billable number", on Incoming Calls	B,H,S	**27**

Table 1-1 Registers and Options Listed Numerically (Continued)

Option/ Register	Title	Mode	Page
408	Number of Rings Before Payphone Answers in Remote Telemetry	B,H,S	**12**
409	Number of Rings Before “Please Dial Again” prompt		**36**
410	Time to Start Fast Telemetry Answer	B,H,S	**12**
411	Duration for Fast Telemetry Answer	B,H,S	**12**
412	Number of Attempts for ALARM Call Home	B,H,S	**13**
414	Number of Attempts for SMDR Call Home	B,H,S	**14**
417	Default Call Completion "Hold-off" Timer	H,S	**29**
418	Times to Repeat “Not a billable number”, on 0- calls	S	**27**
419	Wink Window Size	S	**28**
420	Wink Hold-Off Coinless calls	S	**27**
421	Wink Hold-Off Coin calls	S	**28**
422	Highest Band to Route 0+ to LEC	H,S	**21**
423	Highest Band to Route Local Calls to LEC	H,S	**21**
424	Anti-Fraud Mode for 01+ Calls	B,H,S	**30**
425	Anti-fraud Mode for 011+ Calls	B,H,S	**30**
426	Anti-fraud Mode for 0- Calls	B,H,S	**31**
427	Anti-fraud Mode for 0+ Calls	B,H,S	**31**
428	Anti-fraud Mode for 1+ Calls	B,H,S	**31**
429	Anti-fraud Mode for Local (Sent-Paid) Calls	B,H,S	**31**
430	Anti-fraud Mode for 800 Calls	B,H,S	**31**
431	Default Anti-fraud Mode	B,H,S	**31**
432	Time to Leave Keypad Enabled for OSP Bong	S	**31**
433	Time to Stay On-Hook for New Dial-Tone	B,H,S	**9**
434	Time to Leave Keypad Enabled for Manual IXC	H,S	**32**
435	Time Before Hang-up on Unanswered 011+ call	H,S	**32**
436	Amount to Cap Timed Local Calls	H,S	**59**
437	Timed Call Home to PNM	B,H,S	**14**
438	User-defined Escrow Hopper Amount	H,S	**59**
448	New NPA for Permissive Dialing with Option 114	H,S	**57**
449	Old NPA for Permissive Dialing with Option 114	H,S	**57**
450	New NPA for Permissive Dialing with Option 115	H,S	**57**
451	Old NPA for Permissive Dialing with Option 115	H,S	**57**
452	Out-dialing Delay Period	B,H,S	**10**
453	Payphone Operation Mode	B,H,S	**53**

454	Initial Rate for Local Coin Line Calls	B,H	**53**
455	Red Box Fraud Deterrent	B,H	**53**
456	Simultaneous Dialing Speed	B,H,S	**10**
459	New NPA for Permissive Dialing with Option 111	H,S	**55**
460	Old NPA for Permissive Dialing with Option 111	H,S	**55**
461	New NPA for Permissive Dialing with Option 112	H,S	**56**
462	Old NPA for Permissive Dialing with Option 112	H,S	**56**
463	Drug Phone Shutdown Time #1 (Hrs:Mins)	B,H,S	**10**
464	Drug Phone Startup Time #1 (Hrs:Mins)	B,H,S	**10**
465	Drug Phone Shutdown Time #2 (Hrs:Mins)	B,H,S	**10**
466	Drug Phone Startup Time #2 (Hrs:Mins)	B,H,S	**10**
472	Default language	B,H,S	**11**
474	Delay Dial Tone	B,H,S	**33**
475	Customer Proprietary Feature		**60**
476	Customer Proprietary Feature		**60**
478	Inter-digit Timeout	B,H,S	**60**
479	PCM Call Home Hour	B,H,S	**60**
480	Min of Silence Before Going On-hook to CO	B,H,S	**60**
503	Start Premium Tariff Period	H,S	**17**
504	Start First Discounted Tariff Period	H,S	**17**
505	Start Second Discounted Tariff Period	H,S	**17**
506	First Discount % IntraLATAaLATAl((7)TC/F7 1 Tfı˝-36.890 % I901 -1˝-0.aL Tcı˝[(590)-240587i)9(rs)10(t		

Table 1-1 Registers and Options Listed Numerically (Continued)

Option/ Register	Title	Mode	Page
702	Alarm 2, Handset	B,H,S	**22**
703	Alarm 3, Cash Vault / Bypass Code	B,H,S	**22**
704	Alarm 4, Program Running from ROM	B,H,S	**22**
705	Alarm 5, Rate RAM Reload	B,H,S	**22**
706	Alarm 6, Cash Box Trigger	B,H,S	**23**
707	Alarm 7, Cash Box Full	B,H,S	**23**
708	Alarm 8, Inactivity	B,H,S	**23**
709	Alarm 9, Coin Jam / Walk Away	B,H,S	**23**
710	Alarm 10, Bad Rates	B,H,S	**24**
711	Alarm 11, Call Counts Cleared	B,H,S	**24**
712	Alarm 12, Change in Master Block	B,H,S	**24**
713	Alarm 13, Entry into Telemetry Mode	B,H,S	**24**
714	Alarm 14, Bad Downloaded Program	B,H,S	**24**
715	Alarm 15, SMDR Buffer 80% Full	B,H,S	**24**
716	Alarm 16, SMDR Buffer 100% Full	B,H,S	**25**
717	Alarm 17, Bad Registers and Options	B,H,S	**25**
718	Alarm 18, Force Call Home	B,H,S	**25**
719	Alarm 19, Validation System Alarm	S	**25**
720	Alarm 20, Customer Proprietary	S	**25**
721	Alarm 21, Clock Alarm	B,H,S	**25**
723	Alarm 23, Scheduled Call Home	B,H,S	**26**
727	Alarm 27, Reversed Line Polarity	B,H	**26**
728	Alarm 28, Low Battery Alarm	B,H,S	**26**
750	Cash Vault Alarm Trigger Level	B,H,S	**23**
751	Inactivity Timer	B,H,S	**23**
752	Coin Jam Alarm Threshold	B,H,S	**23**
753	VDC Unsuccessful Access	S	**25**

1.2 Registers and Options Listed by Category

The **Default** column shows the default settings for the coin line Bright and Hybrid (**B/H**) modes and the COCOT line Smart (**S**) mode. The default values are in effect in the payphone when it is initialized. These values are also supplied in default templates with Elcotel payphone network management software.

When a register or option does not apply to the mode of operation being used, the setting should be left at the default value.

The **Related Opt/Reg** column identifies other options and/or registers which may also need to be set.

1.2.1 CONFIGURATION

Table 1-2 Configuration

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
101	**Enable PBX Prefix When Dialing** (Smart) If the payphone must dial through a PBX, set this option ON. In **Register 341**, enter the number that the payphone must dial first to get an outside line.	OFF	OFF	341
341	**PBX Access Code** (Smart) When **Option 101** is enabled the payphone dials the digits in this register before dialing the destination number to the Central Office.	9	9	101
103	**Enable Card Reader** (Bright/Hybrid/Smart) If the payphone is equipped with a "Swipe" type card reader, set this option ON. ***Note:*** *When this option is enabled, you must also enable* ***Options 164 through 167*** *and configure Call Type* ***Registers 240 through 255*** *with the appropriate dialing macro.*	OFF	OFF	164-167 240-255
120	**Enable Credit Card Only Feature** (Bright/Hybrid/ Smart) This option is for payphones that have no cash box, coin slot, or any interior parts that involve the use of coins. When this option is enabled (ON), the payphone accepts 0- or 0+ calls whether or not it has a credit card reader. Non-coin calls are processed normally. All coin calls are restricted.	OFF	OFF	

Table 1-2 Configuration (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
433	**Time to Stay On-Hook for New Dial-Tone** (Bright/ Hybrid/Smart) The number in this register determines how many half-second intervals the payphone waits after a hook-switch transition (call completion, hook flash, and so on) before it attempts to go back off hook towards the Central Office to start a new call. ***Note:*** *Not all CO equipment is the same and some requires a longer on-hook period for interpretation as call termination rather than a special signaling feature.*	5	3	
123	**Enable Payphone Extension Feature** (Hybrid/Smart) When this option is ON, the payphone may be used with an extension phone. ***Note:*** *This option applies only to Smart mode (B1 line).* ***Note:*** *It is the payphone operators responsibility to properly configure the extension phone to restrict unauthorized dialing.*	OFF	OFF	
130	**Enable Rotary (Pulse) Dialing** (Bright/Hybrid/Smart) When this option is enabled (ON), the payphone dials all digits intended for the local CO in rotary mode. All subsequent digits, (answering machines, manual IXCs, and so on) are dialed out in DTMF (tone).	OFF	OFF	
133	**Disable Coin Relay Pre-charging** (Hybrid/Smart) In order for the PCM to actuate the coin relay, it must first attach capacitors to the line to allow them to be charged. Normally, they are charged at the end of each call when the payphone goes back on-hook. With some Central Offices , if the hook-switch is pressed (on-hook) and released (hook-flash), dial tone may be delayed. When this option is enabled (ON), the payphone only charges the storage capacitors prior to actuating the coin relay and does not pre-charge them at the end of a call.	OFF	OFF	
180	**Charged for Incoming Call** When this feature is enabled (ON), the payphone charges for incoming calls. The firmware searches Miscellaneous Price Band 1 for the rate.	OFF	OFF	100 407 408

Table 1-2 Configuration (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
452	**Out-dialing Delay Period** (Bright/Hybrid/Smart) The number in this register represents the number of ½ second increments that the payphone waits before outdialing to the Central Office.	0	0	
456	**Simultaneous Dialing Speed** (Bright/ Hybrid/Smart) The number in this register specifies the number of ½ second increments that the payphone waits between dialed digits when dialing into the Central Office ("trickle dialing" rate). ***Note:*** *For Bright or Hybrid mode, this register should be set to 5.*	5	7	453
463	**Drug Phone Shutdown Time #1** (Bright/Hybrid/Smart) The time, in 24-hour format, set in this register, specifies the beginning time of the first period during which certain call types are restricted. The first restriction period is enabled for individual call types by setting the Drug Restrict #1 option field of **Registers 203-275** to ON.	00:00	00:00	203-275
464	**Drug Phone Startup Time #1** (Bright/Hybrid/Smart) The time, in 24-hour format, set in this register, specifies the ending time of the first period during which certain call types are restricted. The first restriction period is enabled for individual call types by setting the Drug Restrict #1 option field of **Registers 203-275** to ON.	00:00	00:00	203-275
465	**Drug Phone Shutdown Time #2** (Bright/Hybrid/Smart) The time, in 24-hour format, set in this register, specifies the beginning time of the second period during which certain call types are restricted. The second restriction period is enabled for individual call types by setting the Drug Restrict #2 option field of **Registers 203-275** to ON.	00:00	00:00	203-275
466	**Drug Phone Startup Time #2** (Bright/Hybrid/Smart) The time, in 24-hour format, set in this register, specifies the ending time of the second period during which certain call types are restricted. The second restriction period is enabled for individual call types by setting the Drug Restrict #2 option field of **Registers 203-275** to ON.	00:00	00:00	203-275

Table 1-2 Configuration (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
181	**Repeat Voice Prompts** When this feature is enabled (ON), the voice prompts are presented in both English and Spanish, the default language (register 472) being first.	OFF	OFF	472
472	**Default Language** The value set in this register determines the default language used for visual and voice prompts. A **0** sets the default language to English, and **1** sets the default to Spanish.	0	0	181

1.2.2 TELEMETRY

Table 1-3 Telemetry

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
104	**Enable Remote Voice Telemetry** (Bright/Hybrid/Smart) When this option is OFF, remote voice telemetry to the payphone cannot be established. On an incoming call, after the carrier tone times out for lack of modem response, the payphone goes “on hook” rather than waiting for owner bypass code.	ON	ON	
106	**Enable Local Telemetry High Security** (Bright/Hybrid/ Smart) When this option is ON, the upper housing must be unlocked and the Upper Housing alarm triggered in order for the owner bypass code to allow access to local voice telemetry mode.	OFF	OFF	
408	**Number of Rings Before Payphone Answers in Remote Telemetry** (Bright/Hybrid/Smart) If the payphone is configured to allow incoming calls (			

Table 1-3 Telemetry (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
401	**Cash Vault Collection Number** (Bright/Hybrid/Smart) When the collector enters a # key followed by the digits stored in this register, the payphone captures the cashbox amount from Register 800, clears it, and triggers Alarm 3 to call home, if enabled.	000	000	
333	**Primary Number Payphone Calls to Deliver Alarms** (Bright/Hybrid/Smart) If an alarm that is enabled (ON) is triggered, the payphone attempts to "call home" by dialing the digits stored in this register. This register should contain the number of the line to which the payphone network management system modem is connected.			701-728 334
334	**Secondary Number Payphone Calls to Deliver Alarms** (Bright/Hybrid/Smart) If the payphone is unsuccessful in reaching the payphone network management system by dialing the primary call home number in Register 333, it attempts to call home by dialing the digits stored in this register.			701-728 333
412	**Number of Attempts for Alarm Call Home** (Bright/ Hybrid/Smart) The two-digit number stored in this register specifies the number of times that the payphone attempts to call home to report alarm status. If the payphone is not successful in these attempts, it waits 24 hours and then tries again.	3	3	479 437
335	**Primary Number Payphone Calls to Deliver SMDR** (Bright/Hybrid/Smart) When Alarm 15 is enabled and the SMDR buffer reaches the 80% full mark, the payphone calls home to the payphone network management system by dialing the digits in this register in an attempt to upload SMDR data.			715 336
336	**Secondary Number Payphone Calls to Deliver SMDR** (Bright/Hybrid/Smart) If the payphone was unsuccessful in reaching the payphone network management system by dialing the primary SMDR number in **Register 335**, it attempts to call home by dialing the digits in this register.			715 335

Table 1-3 Telemetry (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
414	**Number of Attempts for SMDR Call Home** (Bright/ Hybrid/Smart) The two-digit number stored in this register specifies the number of times that the payphone attempts to call home to upload SMDR data. If the payphone is not successful in these attempts, it waits 24 hours and then tries again.	3	3	
437	**Timed Call Home to PNM** (Bright/Hybrid/Smart) Setting a value in this register causes the payphone to repeatedly call home to payphone network management system at the interval specified (in hours) beginning from the date and time the site operational files were last downloaded.	00	00	412 723

1.2.3 INFORMATION AND SPECIAL CALL PRICING

Table 1-4 Information and Special Call Pricing

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
603	**Price for 976-XXXX Calls** *(Hybrid/Smart)* *The value in this register is the amount charged for 976-XXXX calls. . 0.00 results in a free call. 9.95 restricts the call.* ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 13.*	9.95	9.95	
604	**Price for 411 Information Calls** (Hybrid/Smart) The value in this register is the amount charged for 411 information calls. . 0.00 results in a free call. 9.95 restricts the call. ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 03.*	0.00	0.00	
605	**Price for 1411 Information Calls** (Hybrid/Smart) The value in this register is the amount charged for 1411 information calls. 0.00 results in a free call. 9.95 restricts the call. ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 03.*	0.00	0.00	
606	**Price for 555-1212 Information Calls** (Hybrid/Smart) The value in this register is the amount charged for 555-1212 information calls. 0.00 results in a free call. 9.95 restricts the call. ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 03.*	0.00	0.00	
607	**Price for 1-555-1212 Information Calls** (Hybrid/Smart) The value in this register is the amount charged for 1-555-1212 information calls. 0.00 results in a free call. 9.95 restricts the call. ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 03.*	0.00	0.00	

Table 1-4 Information and Special Call Pricing (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
608	**Price for IntraSTATE Information Calls** (Hybrid/ Smart) The value in this register is the amount charged for IntraSTATE information calls. 0.00 results in a free call. 9.95 restricts the call. ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 03.*	0.00	0.00	
609	**Price for InterSTATE Information Calls** (Hybrid/ Smart) The value in this register is the amount charged for Inter-STATE information calls. 0.00 results in a free call. 9.95 restricts the call. ***Note:*** *In Bright and Hybrid modes, CO rates are charged when a coin line macro is specified for Call Type 03.*	0.00	0.00	

1.2.4 TIME OF DAY DISCOUNTS

Table 1-5 Time of Day Discounts

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
107	**Enable Time of Day Discounts** (Hybrid/Smart) To be used in areas where your payphone must give discounts on sent paid calls depending on the time of day. ***Note:*** *Ensure that values in the discount time and percentage registers (**Registers 503-511**) are correct.*	OFF	OFF	503-511
503	**Start Premium Tariff Period** (Hybrid/Smart) The value in this register specifies the hour (24-hour clock) at which to start normal (premium) charges for sent paid IntraLATA, InterLATA, and InterSTATE calls. "00" is 12:00AM (midnight).	08:00	08:00	107 504-511
504	**Start First Discounted Tariff Period** (Hybrid/Smart) The value in this register specifies the hour (24-hour clock) at which to apply the first % discount to the MTS (Measured Toll Service) portion of sent paid IntraLATA, InterLATA, and InterSTATE calls. "00" is 12:00AM (midnight).	17:00	17:00	107 503 505-511
505	**Start Second Discounted Tariff Period** (Hybrid/Smart) The value in this register specifies the hour (24-hour clock) at which to apply the second % discount to the MTS (Measured Toll Service) portion of sent paid IntraLATA, InterLATA, and InterSTATE calls. "00" is 12:00AM (midnight).	23:00	23:00	107 503-504 506-511
506	**First Discount % IntraLATA** (Hybrid/Smart) The value in this register specifies the % discount to apply to the MTS portion of sent paid IntraLATA calls between the hours in **Registers 504 and 505**.	30	30	107 503-505 507-511
507	**Second Discount % IntraLATA** (Hybrid/Smart) The value in this register specifies the % discount to apply to the MTS portion of Sent Paid IntraLATA, calls between the hours in **Registers 505 and 503**.	60	60	107 503-506 508-511

Table 1-5 Time of Day Discounts (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
508	**First Discount % InterLATA** (Hybrid/Smart) The value in this register specifies the % discount to apply to the MTS portion of Sent Paid InterLATA, calls between the hours in **Registers 504 and 505**.	30	30	107 503-507 509-511
509	**Second Discount % InterLATA** (Hybrid/Smart) The value in this register specifies the % discount to apply to the MTS portion of Sent Paid InterLATA, calls between the hours in **Registers 505 and 503**.	60	60	107 503-508 510-511
510	**First Discount % InterSTATE** (Hybrid/Smart) The value in this register specifies the % discount to apply to the MTS portion of Sent Paid InterSTATE, calls between the hours in **Registers 504 and 505**	30	30	107 503-509 511
511	**Second Discount % InterSTATE** (Hybrid/Smart) The value in this register specifies the % discount to apply to the MTS portion of Sent Paid InterSTATE, calls between the hours in **Registers 505 and 503**.	60	60	107 503-510

1.2.5 1+ IXC (INTER-EXCHANGE CARRIER

Table 1-6 1+IXC (Inter-Exchange Carrier)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
131	**Delete the "1" From All 1+ Calls** (Hybrid/Smart) In some areas a "1" is not required for a long distance call. If this option is enabled and the user dials a "1" preceding the destination number, the “1” is ignored and the remaining numbers are dialed.	OFF	OFF	
310	**IXC 800 Access Number #1** (Hybrid/Smart) Whenever a dialing macro contains a low level command 71, the payphone dials the number in this register as part of the overall protocol of reaching an IXC via 800 access.			
313	**IXC 800 Access Number #2** (Hybrid/Smart) PCM software has the flexibility to support two different 800 IXCs. Whenever a dialing macro contains a low level command 94, the payphone dials the number in this register as part of the overall protocol of reaching your second IXC via 800 access.			
325	**IXC 101XXXX Access Number #1** (Hybrid/Smart) Whenever a dialing macro contains a low level command 92, the payphone dials the number in this register as part of the overall protocol of reaching an IXC via the “equal access” method.			
328	**IXC 101XXXX Access Number #2** (Hybrid/Smart) PCM software has the flexibility to support two different “equal access” IXCs. Whenever a dialing macro contains a low level command 91, the payphone dials the number in this register as part of the overall protocol of reaching your second IXC via the “equal access” method.			
146	Customer Proprietary Feature This feature option is reserved for a specific customer application. Unauthorized use of this feature may result in incorrect payphone operation.	OFF	OFF	

1.2.6 0+/- OSP (OPERATOR SERVICE PROVIDER

Table 1-7 0+/- OSP (Operator Service Provider)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
319	**OSP 800 Access Number #1** (Hybrid/Smart) Whenever a dialing macro contains a low level command 73, the payphone dials the number in this register as part of the overall protocol of reaching an OSP via 800 access.			
322	**OSP 800 Access Number #2** (Hybrid/Smart) PCM software has the flexibility to support two different 800 OSPs. Whenever a dialing macro contains a low level command 76, the payphone dials the number in this register as part of the overall protocol of reaching your second OSP via 800 access			
331	**OSP 101XXXX Access Number #1** (Hybrid/Smart) Whenever a dialing macro contains a low level command 79, the payphone dials the number in this register as part of the overall protocol of reaching an OSP via the “equal access” method.			
332	**OSP 101XXXX Access Number #2** (Hybrid/Smart) PCM software has the flexibility to support two different “equal access” IXCs. Whenever a dialing macro contains a low level command 80, the payphone dials the number in this register as part of the overall protocol of reaching your second OSP via the “equal access” method.			

Table 1-7 0+/- OSP (Operator Service Provider) (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
422	**Highest Band to Route 0+ to LEC** (Hybrid/Smart) Allows the payphone to alter by LATA type how it routes and out-dials 0+ calls. The number in this register specifies the LATA type (and all types "lower") for which the payphone types 0+ calls as Call Type 35. When a number greater than zero is set in this register, all 0+ calls for that LATA type and lower are typed as Call Type 35 and processed according to the dialing macro identified in **Register 235**. The dialing macro should be a direct dial macro; that is, dial to the line (LEC). The allowable numbers are: **0** = Feature disabled **1** = Local **2** = IntraLATA **3** = InterLATA For example: If Call Type 35 (Register 235) is assigned a dialing macro to directly dial the call to the line (LEC) and register 422 contains a "2", all intraLATA calls are typed as Call Type 35 and routed to the LEC by the assigned dialing macro.	0	0	235
423	**Highest Band to Route Local Calls to LEC** (Hybrid/ Smart) Allows the phone to alter how it routes and out-dials local sent paid (coin) calls. The default value of zero disables the feature. A non-zero number stored in this register represents the highest local price band that the payphone types as Call Type 4. All sent paid local calls to higher local price bands are typed as Call Type 18 and processed according to the dialing macro identified in **Register 218**. This allows local sent paid calls to be routed to carriers other than the LEC.	0	0	218

1.2.7 ALARMS

Table 1-8 Alarms

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
701	**Enable Alarm 01, SMDR Buffer Damaged** (Bright/ Hybrid/Smart) This alarm indicates that there is a significant problem in the SMDR data. The SMDR data should be uploaded and cleared from RAM. The data may or may not be usable for generating reports. If this problem occurs often, there may be a hardware or software problem in the PCM. This alarm is identified as "A" when viewing network reports.	OFF	OFF	
702	**Enable Alarm 02, Handset** (Bright/Hybrid/Smart) This alarm indicates that there is a problem with the handset. The handset test and resultant alarm is reliable only with the Elcotel specified handset. This alarm is identified as "B" when viewing network reports.	OFF	OFF	
703	**Enable Alarm 03, Cashbox / Vault Bypass** (Bright/ Hybrid/Smart) This alarm indicates that the Cash Vault Collection feature was used. This alarm is identified as "C" when viewing network reports.	OFF	OFF	
704	**Enable Alarm 04, Program Running from ROM** (Bright/Hybrid/Smart) This alarm indicates that the payphone is using the EPROM copy of the firmware. If this alarm is enabled, a V94 file is identified in the master record for the payphone, and the payphone network management system is properly configured, when this alarm calls home, a new copy of the V94 file is downloaded. This alarm is identified as "D" when viewing network reports.	OFF	OFF	
705	**Enable Alarm 05, Rate RAM Reload** (Hybrid/Smart) This alarm indicates that there was a significant problem in the rates data in RAM and it was reloaded with rates data from the EEPROM. This alarm is identified as "E" when viewing network reports.	OFF	OFF	

Table 1-8 Alarms (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
706	**Enable Alarm 06, Cash Box Trigger** (Bright/Hybrid/ Smart) This alarm indicates that the threshold amount in Register 750 was exceeded. This alarm is identified as "F" when viewing network reports.	OFF	OFF	750
750	**Cash Vault Trigger Level** (Bright/Hybrid/Smart) The value in this register specifies the threshold amount (in dollars) that must be exceeded in order to trigger Alarm 6.	0	0	706
707	**Enable Alarm 07, Cash Box Full ($170)** (Bright/ Hybrid/Smart) This alarm indicates that the volume threshold ($170) in the cashbox was exceeded. Empirical data indicates that volume amounts exceeding this threshold dramatically increase the occurrences of coin jams. This alarm is identified as "G" when viewing network reports.	OFF	OFF	
708	**Enable Alarm 08, Inactivity** (Bright/Hybrid/Smart) This alarm indicates that the "number of hours since the last call" threshold, stored in **Register 751**, was exceeded. This inactivity may indicate a problem with the payphone that makes it unusable by customers. This alarm is identified as "H" when viewing network reports.	OFF	OFF	751
751	**Inactivity Timer** (Bright/Hybrid/Smart) The value in this register specifies the threshold number of hours that must be exceeded in order to trigger Alarm 8.	0	0	708
709	**Enable Alarm 09, Coin Jam - Walk Away** (Bright/ Hybrid/Smart) This alarm indicates that the "number of coin call attempts" (a call where a coin was needed but was not deposited) threshold stored in **Register 752** was exceeded. This alarm is identified as "I" when viewing network reports.	OFF	OFF	752
752	**Coin Jam Alarm Maximum Count** (Bright/Hybrid/ Smart) The value in this register specifies the threshold number of calls that must be exceeded in order to trigger Alarm 9.	0	0	709

Table 1-8 Alarms (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
710	**Enable Alarm 10, Bad Rates** (Hybrid/Smart) This alarm indicates that there is a significant problem with the rates data in RAM. This alarm is identified as "J" when viewing network reports. ***Note:*** *When operating in Bright mode, or after the maintenance command 973 (Bright Maintenance Mode), this alarm will always be enabled.*	OFF	OFF	
711	**Enable Alarm 11, Call Counts Cleared** (Bright/Hybrid/ Smart) This alarm indicates that the call counters were cleared, either locally from the payphone or remotely from PNM. This alarm is identified as "K" when viewing network reports.	OFF	OFF	
712	**Enable Alarm 12, Change in Master Block** (Bright/ Hybrid/Smart) This alarm is indicates that there is a significant problem with the Master Block data in RAM. This alarm is identified as "L" when viewing network reports.	OFF	OFF	
713	**Enable Alarm 13, Voice Telemetry Entered** (Bright/ Hybrid/Smart) This alarm indicates that Local Voice Telemetry was entered. This alarm is identified as "M" when viewing network reports.	OFF	OFF	
714	**Enable Alarm 14, Bad Downloaded Program** (Bright/ Hybrid/Smart) This alarm indicates that there is a significant problem with the downloaded program (PGM) data in RAM. This alarm is identified as "N" when viewing network reports.	OFF	OFF	
715	**Enable Alarm 15, SMDR Buffer 80% Full** (Bright/ Hybrid/Smart) This alarm indicates that there are 80 out of 100 possible SMDR records in the buffer in RAM. This alarm is identified as "Q" when viewing network reports.	OFF	OFF	

716	**Enable Alarm 16, SMDR Buffer Full** (Bright/Hybrid/Smart) This alarm indicates that there are 100 out of 100 possible SMDR records in the buffer. When this occurs, the first (oldest) record is the first record to be overwritten with new data. This alarm is identified as "R" when viewing network reports.	OFF	OFF
717	**Enable Alarm 17, Bad Registers** (Bright/Hybrid/Smart) This alarm indicates that there is a significant problem with the Registers and Options data in RAM. This alarm is identified as "P" when viewing network reports. ***Note:*** *When operating with the Bright Maintenance command, this alarm will always be triggered because no rates data is required.*	OFF	OFF
718	**Enable Alarm 18, Force Call Home** (Bright/Hybrid/Smart) This alarm indicates that a 961 "Call home" maintenance command was issued through Local Voice Telemetry. This alarm is identified as "O" when viewing network reports.	OFF	OFF
753	**# of Bad Validation Attempts for Alarm 19** (Smart) The value in this register specifies the threshold number of unsuccessful attempts that must be exceeded in order to trigger Alarm 19.	0	0
719	**Enable Alarm 19, Validation System Error** (Smart) This alarm indicates that there was a failure during a credit card validation attempt. This alarm is identified as "S" when viewing network reports.	OFF	OFF
720	**Customer Proprietary** (Smart)	OFF	OFF
721	**Enable Alarm 21, Clock Alarm** (Bright/Hybrid/Smart) This alarm indicates that the PCM real time clock is out of		

Table 1-8 Alarms (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
723	**Enable Alarm 23, Timed Call Home Alarm** (Bright/ Hybrid/Smart) This alarm indicates that the payphone called home because of the value in register 437.	OFF	OFF	437 412
727	**Enable Alarm 27, Reversed Polarity** (Bright/Hybrid) If the telephone line polarity is reversed when the payphone goes off-hook, the condition is noted. If this occurs five consecutive times, the alarm is set. This alarm is identified as "V" when viewing network reports.	OFF	OFF	
728	**Enable Alarm 28, Low Battery Alarm** (Bright/Hybrid/ Smart) This alarm indicates that the voltage level of the battery is below the prescribed level. This alarm is only effective on revision “I” PCMs and 5.2.5 or higher software, or Olympian 5501 payphones. Previous PCMs with 5.2.5 software ignore this alarm. ***Note:*** *If a PCM reports this alarm, it is highly unlikely that the battery itself is defective. The most common CAUSE of a low battery alarm is either: 1) The telephone line is not delivering enough current to keep the battery charged or 2) The PCM is consuming too much of the available current for proper operation. This alarm is identified as "X" when viewing network reports.*	OFF	OFF	

1.2.8 ANTI-FRAUD AND ANSWER DETECT

Table 1-9 Anti-Fraud and Answer Detect

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
100	**Allow Incoming Calls** (Bright/Hybrid/Smart) Allows incoming calls. **Register 408** determines number of rings for customer answer. If OFF, the payphone answers on the first ring but presents modem carrier tone.	ON	ON	180 408 407
418	**Times to Say "Not a billable number" 0-** (Smart) As an anti-fraud measure, when a 0- call is made, the phone repeats the phrase "Not a Billable Number" onto the phone line the number of times set in this register.	0	0	
407	**Times to Say "Not a bi**			

Table 1-9 Anti-Fraud and Answer Detect (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
417	**Default Call Completion Timer** (Hybrid/Smart) The two-digit number stored in this register specifies the number of seconds (after answer is detected) before the payphone considers the call to be completed and billable. This field is usually used in areas where there are no SITs (Special Information Tones). In this case, a message usually comes onto the line informing the user if the number dialed is out of service, not available, and so on, but without the SIT, the payphone interprets the message as answer detect. When this happens, customers usually hang up within a few seconds. If they do that before the number of seconds in this register expires, the customer's coins are returned. If DTMF is detected while this counter is running, the timer is cancelled and coins are collected or an SMDR record is created to charge for the call.	5	5	121
125	**Enable Reverse-Battery Answer Detect** (Smart) When this option is enabled (ON), the payphone uses a polarity reversal from the Central Office as the signal that the called party answered. This signaling is used in place of the internal software answer detect algorithms. ***Note:*** *If this feature is used, the CO must provide reverse battery answer supervision (RBAS) on all sent paid coin calls.*	OFF	OFF	

Table 1-9 Anti-Fraud and Answer Detect (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
424	**Anti-Fraud Mode for 01+ Calls** (Bright/Hybrid/Smart) The number stored in this register affects how "Anti-Fraud" is applied to this particular call type. *Note: Coin-Line characteristics do not permit chain dialing. Therefore, when operating in the Bright or Hybrid mode, anti-fraud can be set to "2".* **0** = Keypad disabled, DTMF anti-fraud On (Smart) This setting should be used when you are concerned about fraudulent subsequent dialing and you want the highest level of anti-fraud protection. With this level, the anti-fraud measures are applied as soon as dialing is completed. DTMF anti-fraud protection consists of: If **Option 124** is enabled, the payphone inserts a DTMF 8 if it detects a DTMF 0, or 1. If the payphone detects 6 DTMF digits in a row, it interjects a long "blast" type tone and then terminates the call. **1** = Keypad enabled, DTMF anti-fraud On (Smart) This setting should be used when you are concerned about fraudulent subsequent dialing, but you want the keypad enabled until wink or secondary dial tone is detected in order to allow valid subsequent dialing for voice mail, pagers, ATMs, and so on. You must make the necessary test calls to ensure that this level of fraud protection is adequate. **2** = Keypad enabled, DTMF anti-fraud Off (Bright/ Hybrid/Smart) With this setting, the keypad is continuously enabled. *Note: Setting #2 should only be used when you are sure that dial tone will not reappear on the line until the hook-switch is pressed (no secondary dial tone).*	0	0	102 116 124 425-431
425	**Anti-fraud Mode for 011+ Calls** (Bright/Hybrid/Smart) The number stored in this register affects how anti-fraud is applied to this call type. For a description of anti-fraud see **Register 424**.	0	0	102 116 124 424 426-434

426	**Anti-fraud Mode for 0- Calls** (Bright/Hybrid/Smart) The number stored in this register affects how anti-fraud is applied to this call type. For a description of anti-fraud see **Register 424**.	0	0	102 116 124 424-425 427-434
427	**Anti-fraud Mode for 0+ Calls** (Bright/Hybrid/Smart) The number stored in this register affects how anti-fraud is applied to this call type. For a description of anti-fraud see **Register 424**.	0	0	102 116 124 424-426 428-434
428	**Anti-fraud Mode for 1+ Calls** (Bright/Hybrid/Smart) The number stored in this register affects how anti-fraud is applied to this call type. For a description of anti-fraud see **Register 424**.	0	0	102 116 124 424-427 429-434
429	**Anti-fraud Mode for Local (Sent-Paid) Calls** (Bright/Hybrid/Smart) The number stored in this register affects how anti-fraud is applied to this call type. For a description of anti-fraud see **Register 424**.	0	0	102 116 124 424-428 430-434
430	**Anti-fraud Mode for 800 Calls** (Bright/Hybrid/Smart) The number stored in this register affects how anti-fraud is applied to this call type. For a description of anti-fraud see **Register 424**.	0	0	102 116 124 424-429 431-434
431	**Default Anti-fraud Mode**			

Table 1-9 Anti-Fraud and Answer Detect (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
434	**Time to Leave KP On for Manual IXC** (Hybrid/Smart) After the payphone dials the destination number and answer supervision takes place, the value in this register determines the number of seconds to leave the keypad enabled to allow customers to dial subsequent digits in case they are dialing an alternate IXC. This is related to the use of dialing macro 6 for access to AT&T, Sprint, MCI, and so on. After this time period expires, keypad availability is controlled by the anti-fraud level set in **Register 430**.	30	30	102 116 430
435	**Time Before Hang Up for Unanswered 011+ Call** (Hybrid/Smart) Domestic Central Offices (telephone companies) adhere, for the most part, to a set of standards set forth by the Bellcore organization. These standards define the voltages, currents, busy signals, ring signals, cadence (time on vs. time off), and so on. Most International Central Offices do not adhere to these standards and therefore, the algorithms used for answer detection can not be applied in the same manner. The two digit value stored in this register determines the number of seconds that the payphone allows the customer to wait for an answer on an IDDD (International Direct Distance Dialed) call. When the value in this register expires, if the call was not answered, the payphone terminates the call.	0	0	
124	**Dial "8" After a "0" on Anti-Fraud** (Smart) Setting this option ON prevents a callers from entering "01" to access an International Operator. The phone places an "8" into the “01”sequence (“081”), thus contaminating the dialing pattern.	OFF	OFF	102 116 424-434
126	**Disable Sending a DTMF "#" After 0- Calls** (Smart) When this option is “OFF”, the payphone automatically out-dials a “#” after a 0- or 00- call is dialed. The DTMF # is used as an anti-fraud measure to help prevent callers from dialing additional digits to reach an international operator.	OFF	OFF	

Table 1-9 Anti-Fraud and Answer Detect (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
128	**Enable Anti-fraud on 911 Calls** (Smart) ***Note:*** *This option should be used in conjunction with appropriate field testing. Because the Elcotel anti-fraud mechanism terminates calls when the payphone detects fraud, enabling the anti-fraud feature on 911 calls may terminate them prematurely. While this option enables the owner-operator to prevent customers from committing fraud on 911 calls, it may not be an appropriate anti-fraud method in some 911 systems.*	OFF	OFF	102 116 124 431
121	**Enable Collect On Call Completion** (Hybrid/Smart) This option is for phones that have an optional dollar bill acceptor installed. When the payphone determines that the call was completed (answer detect plus value in register 417), the collect signal is applied immediately to the coin escrow. ***Note:*** *The optional dollar bill acceptor is an external device that merely interfaces with the coin trigger and coin escrow cables and is neither manufactured nor supported by Elcotel.*	OFF	OFF	417
474	**Delay Dial Tone** Sets a delay of 0 to 500 milliseconds after call termination (hook switch on hook transition) to allow time for the coin relay to fire before the phone line is reconnected in response to a subsequent hook switch off hook transition. This prevents false pulse signaling to the CO. The default value of "0" results in 500 ms. Other values represent 15 ms increments based on 0 ms. For example, 1 = 15 ms, 2 = 30 ms, and so on. The maximum value is 99. The necessary setting can be determined by placing a call, performing a hook flash, and assuring that dial tone is returned from the CO.	0	0	

1.2.9 SERVICE DESK

Table 1-10 Service Desk

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
337	**User Access Number for Service Desk™** (Bright/ Hybrid/Smart) When the number in this register is dialed by the user, the call is typed as a Call Type 24 and the Service Desk™ feature is initiated. Call type register 224 specifies dialing macro to be used. The Service Desk dialing macro directs the payphone to dial the number in **Register 338** and enables the payphone to respond to the Service Desk operator keypad commands.			338 117 147
338	**Phone Access Number for Service Desk** (Bright/ Hybrid/Smart) The number in this register is the number dialed by the payphone to contact your Service Desk operator. Your Service Desk operator telephone can be any telephone with a TCU, but not your PNM or PNM Plus telephone(s), which should be dedicated to modem telemetry.			337 117 147
117	**Enable Customer Credit from Service Desk** (Hybrid/ Smart) When this option is enabled (ON), the payphone allows the Service Desk operator to issue credit to the payphone with the Service Desk telephone keypad while the customer is on the line. The operator can issue a credit from $0.05 to $9.95, in nickel increments, toward the next call. The operator enters “#” followed by three digits representing the credit amount in dollars and cents. For example, to credit 25 cents, the operator enters “#025”. ***Note:*** *If option 147 is enabled (ON), option 117 has no effect.*	OFF	OFF	337 338

147 Use Enhanced Service Desk Command Set (Hybrid/ Smart)

When this option is enabled (ON), the payphone recognizes an enhanced set of commands entered by the Service Desk operator through the keypad of the Service Desk telephone during a Service Desk call, as follows:

****1** Reports to the Service Desk operator the last sent paid call dialed and completed, the amount collected for the entire period, and the call duration in minutes and seconds. For example:

The operator enters: ***1*
The payphone reports: *"4487788, 25 cents, 2 minutes 25."*

****2** Reports to the Service Desk operator the last sent paid call dialed, regardless of call completion. The dialed number and, either the amount collected for the entire call (completed calls) or the amount requested by the phone (calls not completed) are reported. For example:

The operator enters: ***2*
The payphone reports: *"4487788, 25 cents."*

****3** Allows the Service Desk operator to enter a telephone number to be outdialed by the payphone. Any credit issued by the #XXX command, or accumulated by

Table 1-10 Service Desk (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
	****6** Initiates a coin escrow return. The payphone first produces a "bong" confirmation tone to the Service Desk operator, then enables the mic for audible verification, then fires the coin relay to return coins. ****7** The payphone gives a "Thank you" prompt to the Service Desk operator, then fires the coin relay to return coins in escrow, then prompts the caller with "Please dial again. Thank you", then goes on hook. ****8** The payphone terminates the Service Desk call, and dials the telephone number previously entered by the Service Desk operator with command **3. If a telephone number was not entered, the payphone dials the previously dialed number as reported by command **2. Credit issued by the Service Desk operator with command #XXX, and/or any coinage deposited, is applied toward the initial rate. Any credit in excess of the initial rate is applied toward additional period charges. **#XXX** Issues a credit from $0.05 to $9.95, in nickel increments, toward the next call. The Service Desk operator enters "#" followed by three digits representing the credit amount in cents. The payphone reports the amount entered to the Service Desk operator only. For example: The operator enters: *#025* The payphone reports: *"25 cents."*			
409	**Number of Rings before "Please Dial Again" Prompt** The number in this register sets the number of rings allowed on an outgoing unanswered call. At the specified number of rings, the prompt is issued and the payphone goes on-hook then off-hook, returning dial tone. Limiting unanswered rings can avoid false answer detection and coin collection from a CO timeout message or other response. A value of "0" disables the function (allows extended ringing) .	0	0	

1.2.10 CALL TYPES

Table 1-11 Call Types

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
200	**0 Restricted** All calls that are disallowed are typed as a Call Type 0 and processed according to the dialing macro identified in the first feature option field of register 200. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	0 OFF OFF	0 OFF OFF	463-466
201	**1 Free Emergency (911)** 911 calls are typed as a Call Type 1 and processed according to the dialing macro identified in the first feature option field of register 201. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	1 OFF OFF	463-466
202	**2 Incoming calls** Incoming calls are typed as Call Type 2 for the purpose of reporting. All feature fields should be left at the default values because there is no outdialing for this call type.	0 OFF OFF	0 OFF OFF	100 180 408
203	**3 Information** All information calls are typed as a Call Type 3 and processed according to the dialing macro installed in the first feature option field of register 203. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	1 OFF OFF	463-466
204	**4 Sent Paid Local calls** All Sent Paid Local calls are typed as a Call Type 4 and processed according to the dialing macro identified in the first feature option field of register 204. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
205	**5 Sent Paid IntraLATA calls** All Sent Paid IntraLATA calls are typed as a Call Type 5 and processed according to the dialing macro identified in the first feature option field of register 205. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466
206	**6 Sent Paid InterLATA calls** All Sent Paid InterLATA calls are typed as a Call Type 6 and processed according to the dialing macro identified in the first feature option field of register 206. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466
207	**7 Sent Paid InterSTATE calls** All Sent Paid InterSTATE calls are typed as a Call Type 7 and processed according to the dialing macro identified in the first feature option field of register 207. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466
208	**8 Sent Paid Extended NPA (Canada, etc.) calls** All Sent Paid Extended calls are typed as a Call Type 8 and processed according to the dialing macro identified in the first feature option field of register 208. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
209	**9 101XXXX 0+ & 0- calls** All 101XXXX 0+ & 0- calls are typed as a Call Type 9 and processed according to the dialing macro identified in the first feature option field of register 209. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	0 OFF OFF	463-466
210	**10 800-NXX-XXXX calls** All 800 calls are typed as a Call Type 10 and processed according to the dialing macro identified in the first feature option field of register 210. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	1 OFF OFF	463-466
211	**11 900-NXX-XXXX calls** All 900 calls are typed as a Call Type 11 and processed according to the dialing macro identified in the first feature option field of register 211. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	0 OFF OFF	0 OFF OFF	463-466
212	**12 976-XXXX calls** All 976-XXXX calls are typed as a Call Type 12 and processed according to the dialing macro identified in the first feature option field of register 212. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	0 OFF OFF	0 OFF OFF	463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
214	**14 01+ (Operator Assisted) International calls** All calls that begin with 01 are typed as a Call Type 14 and processed according to the dialing macro identified in the first feature option field of register 214. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	0 OFF OFF	463-466
215	**15 011+ (Sent Paid Coin) International calls** All calls that begin with 011 are typed as a Call Type 15 and processed according to the dialing macro identified in the first feature option field of register 215. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	0 OFF OFF	463-466
216	**16 101XXXX-1+ calls** All calls that begin with 101XXXX 1+ are typed as a Call Type 16 and processed according to the dialing macro identified in the first feature option field of register 216. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	0 OFF OFF	463-466
217	**17 Speed Dial calls** All Speed Dial calls are typed as a Call Type 17 and processed according to the dialing macro identified in the first feature option field of register 217. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
218	**18 Reclassified Sent Paid calls** When a value greater than 0 is placed in Register 423, all local calls to price bands higher than the number are typed as a Call Type 18 and processed according to the dialing macro identified in the first feature option field of register 218. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	0 OFF OFF	2 OFF OFF	423 463-466
219	**19 Sent Paid Corridor calls** All Sent Paid Corridor calls are typed as a Call Type 19 and processed according to the dialing macro identified in the first feature option field of register 219. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	2 OFF OFF	463-466
221	**21 Call Home** All calls that the payphone initiates for call home (PNM) purposes are typed as a Call Type 21 and processed according to the dialing macro identified in the first feature option field of register 221. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	17 OFF OFF	4 OFF OFF	463-466
222	**22 VDC Billing Records Batch Dump** If the payphone is programmed to call the Elcotel VDC to dump SMDR records on a batch basis, the calls are typed as a Call Type 22 and processed according to the dialing macro identified in the first feature option field of register 222. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	41 OFF OFF	41 OFF OFF	463-466

Feature Registers and Options

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
235	**35 Restricted 0+ calls (Routing to LEC)** When a band number greater than 0 is placed in **Register 422**, all 0+ calls from the associated LATA type and below are typed as a Call Type 35 and processed according to the dialing macro identified in the first feature option field of register 235. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	0 OFF OFF	5 OFF OFF	422 463-466
236	**36 0- calls** All calls that consist of a single 0 are typed as a Call Type 36 and processed according to the dialing macro identified in the first feature option field of register 236. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466
237	**37 00- calls** All calls that consist of only two 0s are typed as a Call Type 37 and processed according to the dialing macro identified in register 237. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466
238	**38 0+ Invalid from Keypad/Swipe/VDC** 0+ calls, that are made where the credit card number does not fit any of the pre-defined patterns, (2, 3, 5, 6, 7, 8, 9, 10, 11, or 12 digits), or the payphone receives a bad swipe from the card reader, or an “Invalid” response from Elcotel VDC, fall into the “Invalid” category and are typed as a Call Type 38 and processed according to the dialing macro identified in the first feature option field of register 238. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	5 OFF OFF	5 OFF OFF	463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
239	**39 0+ Extended NPA calls** 0+ calls where the destination number is categorized as an "Extended NPA" are typed as a Call Type 39 and processed according to the dialing macro identified in the first feature option field of register 239. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466
240	**40 0+ No Credit Card Local calls** 0+ calls where the destination number falls into a Local band and the user either presses a "0" at the prompt for an Operator, does not enter any destination number, or the Elcotel bong in the phone is disabled (**Option 164** OFF), are typed as a Call Type 40 and processed according to the dialing macro identified in the first feature option field of register 240. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	164 463-466
241	**41 0+ No Credit Card IntraLATA** 0+ calls where the destination number falls into an IntraLATA band and the user either presses a "0" at the prompt for an Operator, does not enter any destination number, or the Elcotel bong in the phone is disabled (**Option 165** OFF), are typed as a Call Type 41 and processed according to the dialing macro identified in the first feature option field of register 241. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	165 463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
242	**42 0+ No Credit Card InterLATA** 0+ calls where the destination number falls into an InterLATA band and the user either presses a "0" at the prompt for an Operator, does not enter any destination number, or the Elcotel bong in the phone is disabled (**Option 166** OFF), are typed as a Call Type 42 and processed according to the dialing macro identified in the first feature option field of register 242. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	166 463-466
243	**43 0+ No Credit Card InterSTATE** 0+ calls where the destination number falls into an InterSTATE band and the user either presses a "0" at the prompt for an Operator, does not enter any destination number, or the Elcotel bong in the phone is disabled (**Option 167** OFF), are typed as a Call Type 43 and processed according to the dialing macro identified in the first feature option field of register 243. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	167 463-466
244	**44 0+ Bell Card Local** 0+ calls where the destination number falls into a Local band, the Elcotel bong in the phone is on (**Option 164**), and the user keypad enters or swipes a Bell calling card, are typed as a Call Type 44 and processed according to the dialing macro identified in the first feature option field of register 244. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	164 463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
245	**45 0+ Bell Card IntraLATA** 0+ calls where the destination number falls into an IntraLATA band, the Elcotel bong in the phone is on (**Option 165**), and the user keypad enters or swipes a Bell calling card, are typed as a Call Type 45 and processed according to the dialing macro identified in the first feature option field of register 245. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	165 463-466
246	**46 0+ Bell Card InterLATA** 0+ calls where the destination number falls into an InterLATA band, the Elcotel bong in the phone is on (**Option 166**), and the user keypad enters or swipes a Bell calling card, are typed as a Call Type 46 and processed according to the dialing macro identified in the first feature option field of register 246. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	166 463-466
247	**47 0+ Bell Card InterSTATE** 0+ calls where the destination number falls into an InterSTATE band, the Elcotel bong in the phone is on (**Option 167**), and the user keypad enters or swipes a Bell calling card, are typed as a Call Type 47 and processed according to the dialing macro identified in the first feature option field of register 247. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	167 463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
248	**48 0+ Commercial CC Local** 0+ calls where the destination number falls into a Local band, the Elcotel bong in the phone is on (**Option 164**), and the user keypad enters or swipes a Commercial Credit Card, are typed as a Call Type 48 and processed according to the dialing macro identified in the first feature option field of register 248. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	164 463-466
249	**49 0+ Commercial CC IntraLATA** 0+ calls where the destination number falls into an IntraLATA band, the Elcotel bong in the phone is on (**Option 165**), and the user keypad enters or swipes a Commercial Credit Card, are typed as a Call Type 49 and processed according to the dialing macro identified in the first feature option field of register 249. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	165 463-466
250	**50 0+ Commercial CC InterLATA** 0+ calls where the destination number falls into an InterLATA band, the Elcotel bong in the phone is on (**Option 166**), and the user keypad enters or swipes a Commercial Credit Card, are typed as a Call Type 50 and processed according to the dialing macro identified in the first feature option field of register 250. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	166 463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
251	**51 0+ Commercial CC InterSTATE** 0+ calls where the destination number falls into an InterSTATE band, the Elcotel bong in the phone is on (**Option 167**), and the user keypad enters or swipes a Commercial Credit Card, are typed as a Call Type 51 and processed according to the dialing macro identified in the first feature option field of register 251. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	167 463-466
252	**52 0+ Unidentified CC Local** 0+ calls where the destination number falls into a Local band, the Elcotel bong in the payphone is on (**Option 164**), and the user keypad enters or swipes a card that is between 16 and 40 digits in length, are typed as a Call Type 52 and processed according to the dialing macro identified in the first feature option field of register 252. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	164 463-466
253	**53 0+ Unidentified CC IntraLATA** 0+ calls where the destination number falls into an IntraLATA band, the Elcotel bong in the payphone is enabled (**Option 165**), and the user keypad enters or swipes a card that is between 16 and 40 digits in length, are typed as a Call Type 53 and processed according to the dialing macro identified in the first feature option field of register 253. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	165 463-466

254 54 0+ Unidentified CC InterLATA

0+ calls where the destination number falls into a InterLATA band, the Elcotel bong in the phone is enabled (**Option 166**), and the user keypad enters or swipes a card that is between 16 and 40 digits in length, are typed as a Call Type 54 and processed according to the dialing

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
271	**71 0+ No Credit Card - Corridor** 0+ calls where the destination number falls into a Corridor band and the user either presses a "0" at the prompt for an Operator or does not enter any destination number, are typed as a Call Type 71 and processed according to the dialing macro identified in the first feature option field of register 271. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466
272	**72 0+ Bell Card - Corridor** 0+ calls where the destination number falls into a Corridor band and the user keypad enters or swipes a Bell calling card, are typed as a Call Type 72 and processed according to the dialing macro identified in the first feature option field of register 272. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466

Table 1-11 Call Types (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
273	**73 0+ Commercial Credit Card - Corridor** 0+ calls where the destination number falls into a Corridor band and the user keypad enters or swipes a Commercial Credit Card are typed as a Call Type 73 and processed according to the dialing macro identified in the first feature option field of register 273. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466
274	**74 0+ Unidentified Credit Card - Corridor** 0+ calls where the destination number falls into a Corridor band and the user keypad enters or swipes a card that is between 16 and 40 digits in length are typed as a Call Type 74 and processed according to the dialing macro identified in the first feature option field of register 274. The second and third feature option fields, if set to ON, enable the Drug Restrict #1 and Drug Restrict #2 call restriction periods, respectively, for this call type. Registers 463 through 466 specify the beginning and ending times for the periods.	16 OFF OFF	5 OFF OFF	463-466

1.2.11 MACRO TABLES

Table 1-12 Macro Tables

Option/ Register	Description	Default B/H and S	Related Opt/Reg
300	**Macro Table #45 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00** If none of the predefined macros contained in the operating system meet your requirement for a particular dialing protocol, you can create a custom dialing macro. In order to use this feature, you must know the dialing protocol used by the service which the macro is intended to access. Dialing macros consist of a series of low level commands shown in *5. Low Level Commands*. Custom dialing macros can usually be based on one of the predefined macros shown in *4. Predefined Dialing Macros*. Contact Elcotel Technical Support for assistance.	Zeroes as shown	200-275
301	**Macro Table #46 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00** See Register 300.	Zeroes as shown	200-275
302	**Macro Table #47 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00** See Register 300.	Zeroes as shown	200-275
303	**Macro Table #48 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00** See Register 300.	Zeroes as shown	200-275
304	**Macro Table #49 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00** See Register 300.	Zeroes as shown	200-275
305	**Macro Table #50 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00** See Register 300.	Zeroes as shown	200-275

1.2.12 COIN LINE

Table 1-13 Coin Line

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
453	**Payphone Operation Mode** (Bright/ Hybrid/Smart) The number in this register specifies the mode in which a coin line capable payphone operates. **0** causes the payphone to operate as a **Smart** payphone for **B-1 line** installations. This mode uses solely the routing, rating , and answer supervision capability of the payphone. **1** causes the payphone to operate as a **Hybrid** payphone for **coin line** installations. This mode allows use of either the Central Office or the payphone capability for routing, rating, and answer supervision on a selective basis by call type. **2** causes the payphone to operate as a **Bright** payphone for **coin line** installations. This mode relies solely on the CO for call routing, rating, and answer supervision.	2	0	140 141 454-456
454	**Initial Rate for Local Coin Line Calls** (Bright/Hybrid) The two-digit number in this register specifies the amount in nickels that the payphone requires for a complete deposit in order to allow a caller to complete a local call. The default is “04”. ***Note:*** *When the amount is reported or entered through voice telemetry, it is in terms of nickels. When this register is configured through PNM, it is in terms of dollars. Therefore, the default shown in PNM is “0.20” and any different rate entered through PNM must be a dollar amount.*	0.20	0.20	453
455	**Red Box Fraud Deterrent** (Bright/Hybrid) The number in this register specifies the number of seconds the payphone filters the handset microphone to prevent fraudulent injection of coin tone deposits during			

Table 1-13 Coin Line (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
140	**Enable Timed Local Calls** (Hybrid) When this option is enabled (ON), all local coin calls are timed according to the initial and additional time periods for Local Band 1 from the rates file. The initial local rate is controlled by the Central Office, but additional rates are controlled by the payphone. The payphone microphone is disabled until voice answer is detected so that accurate timing can be accomplished.	OFF	OFF	453
141	**Enable Reversed Coin Disposal** (Bright/Hybrid) When this option is enabled (ON), all coin disposal signals are interpreted inversely. If you have information indicating that the Central Office equipment provides coin disposal signals in reverse, this option should be enabled. This option should never be arbitrarily enabled without making sufficient test calls to verify proper relay operation. This feature only affects the payphone when it is optioned to operate in a Bright or Hybrid Coin line (**Option 453**).	OFF	OFF	453
142	**Disable Line Polarity Keypad Control** (Bright/Hybrid) When enabled (ON), this option allows the keypad to remain active regardless of line polarity reversals. This is primarily to prevent disabling on 0+ calls. When this option is OFF, the keypad is disabled during periods of line polarity reversal.	OFF	OFF	453
110	**Coin Mechanism Selector (Off = ECM / On = Mechanical)** (Bright/Hybrid/Smart) ***Note:*** *This option is only for Olympian 5501 payphones and does not apply to Series-5.* This option must be ON if a mechanical 20A coin mechanism is installed in the payphone and OFF if an ECM is installed.	OFF	OFF	453
113	**Disable Red Box Fraud Deterrent on 01 and 011 International Calls** (Bright/Hybrid) When this option is enabled (ON), any Red Box Fraud Deterrent set in register 455 is **not** applied to 01 and 011 international calls.	OFF	OFF	453 455

1.2.13 PERMISSIVE DIALING

Table 1-14 Permissive Dialing

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
111	**Enable Permissive Dialing with Registers 459 and 460** (Hybrid/Smart) When a NPA is added, a grace period is allowed, during which the call can be dialed both the existing (old) way and the split (new) way, hence the term "Permissive." This option enables the permissive dialing feature used in conjunction with **Registers 459 and 460**. The existing (old) NPA must be placed in 459 and the split (new) NPA must be placed in 460. The dialing patterns and tariffs for the existing NPA are used when the split NPA is dialed. *Note: This feature should only be used until the permissive dialing period ends. At that time a new Rate Center file must be ordered because of the possibility of significant differences in rates, exchanges, and LATA types.*	OFF	OFF	459 460
459	**New NPA for Permissive Dialing with Option 111** (Hybrid/Smart) When you enable **Option 111**, you must enter the split (new) NPA in this register, and the existing (old) NPA in **Register 460**.	200	200	111 460
460	**Old NPA for Permissive Dialing with Option 111** (Hybrid/Smart) When you enable **Option 111**, you must enter the existing (old) NPA in this register, and the split (new) NPA in **Register 459**.	200	200	111 459

Table 1-14 Permissive Dialing (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
112	**Enable Permissive Dialing with Registers 461 and 462** (Hybrid/Smart) When a NPA is added, a grace period is allowed, during which the call can be dialed both the existing (old) way and the split (new) way, hence the term "Permissive." This option enables the permissive dialing feature used in conjunction with **Registers 461 and 462**. The existing old) NPA must be placed in 461 and the split (new) NPA must be placed in 462. The dialing patterns and tariffs for the existing NPA are used when the split NPA is dialed. *Note: This feature should only be used until the permissive dialing period ends. At that time a new Rate Center file must be ordered because of the possibility of significant differences in rates, exchanges, and LATA types.*	OFF	OFF	461 462
461	**New NPA for Permissive Dialing with Option 112** (Hybrid/Smart) When you enable **Option 112**, you must enter the split (new) NPA in this register, and the existing (old) NPA in **Register 462**.	200	200	112 462
462	**Old NPA for Permissive Dialing with Option 112** (Hybrid/Smart) When you enable **Option 112**, you must enter the existing (old) NPA in this register, and the split (new) NPA in **Register 461**.	200	200	112 461
114	**Enable Permissive Dialing with Registers 448 and 449** (Hybrid/Smart) When a NPA is added, a grace period is allowed, during which the call can be dialed both the existing (old) way and the split (new) way, hence the term "Permissive." This option enables the permissive dialing feature used in conjunction with **Registers 448 and 449**. The existing NPA should be placed in 449 and the split (new) NPA should be placed in 448. The dialing patterns and tariffs for the existing NPA are used when the split (new) NPA is dialed. *Note: This feature should only be used until the permissive dialing period ends. At that time a new Rate Center file must be ordered because of the possibility of significant differences in rates, exchanges, and LATA types.*	OFF	OFF	448 449

Table 1-14 Permissive Dialing (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
448	**New NPA for Permissive Dialing with Option 114** (Hybrid/Smart) When you enable **Option 114**, you must enter the split (new) NPA in this register and the existing (old) NPA in **Register 449**.	200	200	114 449
449	**Old NPA for Permissive Dialing with Option 114** (Hybrid/Smart) When you enable **Option 114**, you must enter the existing (old) NPA in this register, and the split (new) NPA in **Register 448**.	200	200	114 448
115	**Enable Permissive Dialing with Registers 450 and 451** (Hybrid/Smart) When a NPA is added, a grace period is allowed, during which the call can be dialed both the existing (old) way and the split (new) way, hence the term "Permissive." This option enables the permissive dialing feature used in conjunction with **Registers 450 and 451**. The existing (old) NPA must be placed in 450 and the split (new) NPA should be placed in 451. The dialing patterns and tariffs for the existing NPA are used when the split NPA is dialed. *Note: This feature should only be used until the permissive dialing period ends. At that time a new Rate Center file must be ordered because of the possibility of significant differences in rates, exchanges, and LATA types.*	OFF	OFF	450 451
450	**New NPA for Permissive Dialing with Option 115** (Hybrid/Smart) When you enable **Option 115**, you must enter the split (new) NPA in this register, and the existing (old) NPA in **Register 451**.	200	200	115 451
451	**Old NPA for Permissive Dialing with Option 115** (Hybrid/Smart) When you enable **Option 115**, you must enter the existing (old) NPA in this register, and the split (new) NPA in **Register 450**.	200	200	115 450

1.2.14 MISCELLANEOUS

Table 1-15 Miscellaneous

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
105	**SMDR - Store Dial Around Calls Only** This option enables you to preserve space in the SMDR Buffer by saving ONLY calls that fall into the category of "Dial Around." Example: 1-800-???-????, 10???, 101?????	OFF	OFF	
109	**Allow User to Dial *67 and *82 Caller ID Prefix Codes** (Bright/Hybrid/Smart) When this option is enabled (ON), the payphone user can prefix any call with the digits *67 or *82 for the purpose of blocking or unblocking, respectively, the transmission of caller ID information to the called party.	OFF	OFF	
119	Customer Proprietary Feature This feature option is reserved for a specific customer application. Unauthorized use of this feature may result in incorrect payphone operation.	OFF	OFF	
132	Customer Proprietary Feature This option is reserved for a specific customer application. Unauthorized enabling of this feature may cause incorrect payphone operation.	OFF	OFF	
134	**Do Not Correct User Dialing** (Hybrid/Smart) With this option enabled (ON), the payphone outdials the exact digits that the user dialed. When the option is disabled (OFF), corrective dialing is performed by the payphone based upon dialing patterns in the R94 rates file.	OFF	OFF	
143	Customer Proprietary Feature This option is reserved for a specific customer application. Unauthorized enabling of this feature may cause incorrect payphone operation.	OFF	OFF	
164	**Enable Elcotel Bong for 0+ Local Calls** (Smart) When this option is enabled (ON), the Elcotel bong is used on 0+ Local calls.	OFF	OFF	103

Table 1-15 Miscellaneous (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
165	**Enable Elcotel Bong for 0+ IntraLATA Calls** (Hybrid/ Smart) When this option is enabled (ON), the Elcotel bong is used on 0+ IntraLATA calls. ***Note:*** *Enable this feature when using a payphone equipped with a card reader.*	OFF	OFF	103
166	**Enable Elcotel Bong for 0+ InterLATA Calls** (Hybrid/ Smart) When this option is enabled (ON), the Elcotel bong is used on 0+ InterLATA calls. ***Note:*** *Enable this feature when using a payphone equipped with a card reader.*	OFF	OFF	103
167	**Enable Elcotel Bong for 0+ InterSTATE Calls** (Hybrid/ Smart) When this option is enabled (ON), the Elcotel bong is used on 0+ Interstate calls. ***Note:*** *Enable this feature when using a payphone equipped with a card reader.*	OFF	OFF	103
436	**Amount to Cap Timed Local Coin Calls** (Hybrid/ Smart) The value in this register specifies **in nickels**, the maximum amount charged for a timed local call. When the specified amount is reached, the payphone no longer prompts for additional coin deposits.	000	000	453 140
438	**User-defined Escrow Hopper Amount** (Hybrid/Smart) Placing a dollar value from 3.00 (minimum) to 5.50 (maximum) in this register specifies the amount at which the payphone collects coins held in the escrow hopper. An amount out of this range causes the payphone to revert to the standard amount of $5.50. ***Note:*** *This register, if used, should be set to an amount greater than the highest initial rate for any call. Otherwise, on calls with initial rates greater than the register 438 amount, deposits are returned and the user can never complete the call.*	0.00	0.00	

Table 1-15 Miscellaneous (Continued)

Option/ Register	Description	Default B/H	Default S	Related Opt/Reg
475	**Customer Proprietary Feature** This option is reserved for a specific customer application. Unauthorized enabling of this feature may cause incorrect payphone operation.	60	60	132
476	**Customer Proprietary Feature** This option is reserved for a specific customer application. Unauthorized enabling of this feature may cause incorrect payphone operation.	2	2	132
478	**Inter-digit Timeout** (Bright/Hybrid/Smart) The value in this register specifies the number of seconds allowed between dialed digits. The maximum value is seven (7). A value of zero (0) results in a default timeout of 5 seconds.	0	0	
479	**PCM Call Home Hour** (Bright/Hybrid/Smart) This register provides a programmed payphone-call-home capability with a one hour window. The value in this register specifies the hour to call and the last two digits of the payphone telephone number are used as the minute. If the last two digits are greater than 59, the firmware subtracts 60. A value of zero in this register disables the feature.	0	0	412
480	**Min of Silence Before Going On-hook to CO** (Bright/ Hybrid/Smart) The value in this register specifies the number of minutes of detected silence on the line before the payphone goes on-hook regardless of the hookswitch condition. This allows the payphone to call home and/or be polled even if the handset is missing or left off-hook. A value of zero disables this feature.	0	0	
185	**Spare (Reject Keyed-in Visa Card)** When ON, the payphone rejects **Visa** card transactions when the card number is entered via the keypad. This ensures “card in hand” (swiped)transactions.	OFF		

2. CALL COUNT REGISTERS

Call count registers accumulate counts of calls and coinage. The counters are reported when a telemetry session is established between the payphone and the payphone network management system.

Each description also identifies the command as relevant to the “Smart” and/or “Hybrid” and/or “Bright” mode of operation. Operation mode is a feature of coin line capable payphones and is controlled by register 453.

Table 2-1 Call Count Registers

Register	Description
800	**Present Cash Box Total** (Bright/Hybrid/Smart) The amount in this register represents the total amount (in dollars) since being reset with command 962 in voice telemetry, being reset through the payphone network management system, or since the cash box collection feature was used.
801	**Totalizer Amount** (Bright/Hybrid/Smart) The amount in this register represents the total amount (in dollars) in the coin box since being reset by defaulting. The counter is intended to keep a totalized amount from the day the PCM is installed. **Note:** The 983 Maintenance command can be used to reset this value.
810	**Total Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of all calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system.
811	**Local Sent Paid Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of Local Sent-Paid calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system. **Note:** In coin line operation, all sent paid calls are counted as local because all are routed the CO without typing.
812	**1+ Sent Paid Coin Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of Non Local Sent-Paid calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system. **Note:** In coin line operation, all sent paid calls are counted as local because all are routed to the CO without typing.

Table 2-1 Call Count Registers (Continued)

Register	Description
813	**0+ Non Sent Paid Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of 0+ Non Sent- Paid calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system.
814	**0- Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of Operator only calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system.
815	**Information Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of all Information calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system.
816	**Miscellaneous Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of Miscellaneous call (not included in 811, 812, 813, 814, 815) since being reset with command 962 in voice telemetry, or being reset through the payphone network management system.
817	**Speed Dial Call Count** (Bright/Hybrid/Smart) The amount in this register represents the total number of Speed dial calls since being reset with command 962 in voice telemetry, or being reset through the payphone network management system.
818	**Report Number of Walk-Aways** (Bright/Hybrid) Walk-Away fraud occurs on coin lines when a caller does not deposit coins for the overtime call period. This feature reports the number of times that callers commit Walk-Away Fraud. The counts are tallied to the coin Call Types that are using Coin-line Macro 16. The counters can be reported each time the payphone calls home or is polled by the payphone network management system. The counter is also accessible through voice telemetry.

3. MAINTENANCE COMMANDS

Maintenance commands are like registers which, when issued (accessed) by entering the command (register) number during voice telemetry, cause actions to take place in the payphone.

In some cases, such as date and time commands, the value is reported when accessed and can also be set by keying the sequence “

Table 3-1 Maintenance Commands (Continued)

Command	Description
967	**Report Any Alarms that are Set** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone immediately reports any alarms that are triggered or thresholds that were crossed.
969	**Burn RAM to EEPROM** Bright/Hybrid/Smart) When this maintenance command is issued, the payphone transfers the information from RAM into the EEPROM to make it available as backup.
972	**Clear Alarms** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone clears **all** alarms. **Note:** Issuing this command does **not resolve** the reasons for the alarms (handset missing, SMDR full, coin jam, and so on), but only clears the alarm status.
973	**Bright Maintenance Mode** (Bright) Accessing this register causes the payphone to load the battery backed RAM with the defaults for Bright Coin line operation. This command is used for temporary installations until the payphone network management system operator can download the payphone permanent Site Operational Files. To prevent accidental use, register 975 must be set to a value of “2” before this command can be performed.
975	**Access Restricted Registers** (Bright/Hybrid/Smart) Setting a “1” in this register allows access to registers that need added security. These registers are 300, 301, 302, 303, 304, 305, 501, 968, 969, 982, 983. Setting a 2 in this register provides access to the Bright Maintenance Command (973) for coin line operation.
977	**Read/Set Hours/Minutes** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone reports the hours and minutes in a 24 hour format. If the hours and minutes are not correct, you can set them by keying the sequence “*hhmm*”.
978	**Read/Set Month/Day** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone reports the month and day. If the month and day are not correct, you can set them by keying the sequence “*mmdd*”.
979	**Read/Set Year** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone reports the last two digits of the year. If the year is not correct, you can set it by keying the sequence “*yy*”.

Table 3-1 Maintenance Commands (Continued)

Command	Description
980	**Read/Set Day of Week** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone reports the day of the week. Sunday=1, Monday=2, Tuesday=3, Wednesday=4, Thursday=5, Friday=6 Saturday=7. If the day of the week is not correct, you can set it by keying the sequence “*n*”.
982	**Clear VDC SMDR Buffer** (Smart) When this maintenance command is issued, the payphone clears all VDC SMDR information from its buffer.
983	**Clear Totalizer** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone resets the Totalizer to zero.
984	**Clear Internal Diagnostics Buffer** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone clears all information from the diagnostics events recorder buffer. This is usually done to create a known starting point from which to collect diagnostics information.
986	**Report Line Current Status** (Bright/Hybrid/Smart) When this maintenance command is issued, the payphone reports the line polarity and line current status (0= no line current, 1= forward, 2= reversed).
987	**Report Size of Last Wink** (Smart) When this maintenance command is issued, the payphone reports the size of the last wink in 15 millisecond increments. For example, 4=60 ms, 5=75 ms, and 6=90 ms. This information is helpful when tailoring your payphone via Register 419 to the characteristics of the telephone line. Note that not all types of calls return a wink because a wink is actually a "by-product" of equipment switching in Central Offices. Therefore, the "last wink" might have occurred several calls previously.
999	**Default Board** When this maintenance command is issued, the payphone resets the PCM to the default register and options settings.

4. PREDEFINED DIALING MACROS

Predefined dialing macros are built into the operating system. Gaps in the macro numbering sequence represent macros that are not presently defined for use. You can also create custom dialing macros. See Section 3., *Creating Custom Dialing Macros* in *LP 5.4 Firmware Operation Manual, Volume 1: Configuration* for more information.

The macro listing format is as follows:

Macro {#} {macro title}

{low level command} {command description}
{low level command} {command description}
{low level command} {command description}
.
.
.

4.1 Macro 0 Restricted Calls

11 Say "Invalid number"

4.2 Macro 1 Direct Dial Open Mic. Immediately (Free Call)

22 Correct special area dialing
30 Initialize dialing sequence
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
68 Set up return code table
01 Look for bong
33 Voice detect for non sent paid (coinless) calls

4.3 Macro 2 Direct Dial Coin (Sent Paid) Call

22 Correct special area dialing
30 Initialize dialing sequence
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
34 Wait for voice, open mic., start anti-fraud

4.4 Macro 4 Payphone Call Home

30 Initialize dialing sequence
70 Dial destination number
34 Wait for voice, open mic., start anti-fraud

4.5 Macro 5 Direct Dial Coinless (Non Sent Paid) Call

22 Correct special area dialing
30 Initialize dialing sequence
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
41 Wait for bong from LEC, delay for ear piece on, send CC#
01 Wait 1 second
36 Special voice detect for OSPs

4.6 Macro 6 Manual IXC (Timed Keypad)

22 Correct special area dialing
30 Initialize dialing sequence
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
32 Wait for voice, open mic. SIT detect, anti-fraud, manual IXC
24 Block 01 & 0809 from 1-800 manual IXC calls

4.7 Macro 7 800 IXC Access #1 (With NPA)

30 Initialize dialing sequence
22 Correct special area dialing
71 Dial IXC 800 access number #1 (from register 310)
26 Add NPA if not dialed (Home NPA assumed)
46 Set up 35 second reroute timer
31 Wait for progress tone
47 Fast dialing speed (75ms/75ms)
72 Dial IXC authorization code #1 (from register 311)
38 Wait 1 second
70 Dial destination number
38 Wait 1 second
34 Wait for voice, open mic., start anti-fraud

4.8 Macro 8 101XXXX IXC Access #1

4.11 Macro 11 101XXXX IXC Access #2

30 Initialize dialing sequence
22 Correct special area dialing
26 Add NPA
91 Dial 101XXXX IXC access number #2 (Register 328)

4.15 Macro 17 Payphone Call Home - Local Coin Line Access

54 Start coin line processing
56 Set initial rate
30 Initialize dialing sequence
70 Dial destination number
34 Wait for voice, open mic., start anti-fraud

4.16 Macro 18 Service Desk - Local Coin Line Access

54 Start coin line processing
56 Set initial rate
30 Initialize dialing sequence
81 Dial Service Desk
68 Set up return code table
04 If DTMF * is detected, say SMDR
If DTMF A,B,D is detected, collect coins
If DTMF C is detected, start Service Desk credit
33 Voice detect for non sent paid (coinless) calls
12 Disable keypad
69 Alternate Command Set
11 Delay coin line Service Desk credit coin tones
15 15 seconds

4.17 Macro 19 101XXXX OSP Access #1

30 Initialize dialing sequence
79 Dial OSP 101XXXX access number #1 (Register 331)
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
46 Set up 35 second reroute timer
41 Wait for bong from LEC, delay for ear piece on, send CC#
01 1 second
68 Set up return code table
02 If DTMF "B" is detected, splash back
36 Special voice detect for OSPs

4.18 Macro 22 800 OSP Access #1

30 Initialize dialing sequence
73 Dial OSP 800 access number #1 (Register 319)
50 Remove expiration date from credit card #
26 Add NPA
46 Set up 35 second reroute timer
25 Say "One moment please"
31 Wait for progress tone
47 Fast dialing speed 75ms/75ms
74 Dial OSP Authorization code #1 (Register 320)
70 Dial destination number
41 Wait for bong, delay for ear piece on, send CC#
01 1 second
68 Set up return code table
02 If DTMF "B" is detected, splash back
36 Special voice detect for OSPs

4.19 Macro 23 AMNEX 800 0+ Access #1

30 Initialize dialing sequence
26 Add NPA
69 Alternate Command Set
03 Special processing for Amnex
73 Dial OSP 800 access number #1 (Register 319)
46 Set up 35 second reroute timer
25 Say "One moment please"
31 Wait for progress tone
47 Fast dialing speed 75ms/75ms
74 Dial OSP authorization code. Register 320
38 Wait 1 second
70 Dial destination number
51 Wait 1/2 second
85 Dial Credit Card buffer
64 Send DTMF "#"
64 Send DTMF "#"
36 Special voice detect for OSPs
68 Set up return code table
02 If DTMF "B" is detected, splash back

4.20 Macro 24 AMNEX 800 0- Access #1

30 Initialize dialing sequence
26 Add NPA
73 Dial OSP 800 access number #1 (Register 319)
46 Set up 35 second reroute timer
25 Say "One Moment Please"
31 Wait for progress tone
47 Fast Dialing speed 75ms/75ms
74 Dial OSP Authorization code #1 (Register 320)
38 Wait 1 second
70 Dial destination number
36 Special voice detect for OSPs
68 Set up return code table
02 If DTMF "B" is detected, splash back

4.21 Macro 25 101XXXX OSP Access #1 (Add NPA)

30 Initialize dialing sequence
26 Add NPA
79 Dial OSP 101XXXX access number #1 (Register 331)
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
41 Wait for bong, delay for ear piece on, send CC#
01 1 Second
68 Set up return code table
02 If DTMF "B" is detected, splash back
36 Special voice detect for OSPs

4.22 Macro 27 101XXXX OSP Access #2

30 Initialize dialing sequence
80 Dial OSP 101XXXX access number #2 (Register 332)
70 Dial destination number
63 Block 0- converted to 01 by dialing "#"
46 Set up 35 second reroute timer
41 Wait for bong, delay for ear piece on, send CC#
02 2 Seconds
68 Set up return code table
02 If DTMF "B" is detected, splash back
36 Special voice detect for OSPs

4.23 Macro 30 800 OSP Access #2

30 Initialize dialing sequence
76 Dial OSP 800 access number #2 (Register 322)
50 Remove expiration date from credit card #
26 Add NPA
46 Set up 35 second reroute timer
25 Say "One moment please"
31 Wait for progress tone
47 Fast dialing speed 75ms/75ms
77 Dial OSP authorization code #2 (Register 323)
70 Dial destination number
41 Wait for bong, delay for ear piece on, send CC#
01 1 second
68 Set up return code table
02 If DTMF "B" is detected, splash back
36 Special voice detect for OSPs

4.24 Macro 31 AMNEX 800 0+ Access #2

30 Initialize dialing sequence
26 Add NPA
69 Alternate Command Set
03 3 seconds
76 Dial OSP 800 access number #2 (Register 322)
46 Set up 35 second reroute timer
25 Say "One moment please"
31 Wait for progress tone
47 Fast dialing speed 75ms/75ms
77 Dial OSP authorization code #2 (Register 323)
38 Wait 1 second
70 Dial destination number
51 Wait 1/2 second
85 Dial credit card buffer
64 Send DTMF "#"
64 Send DTMF "#"
36 Special voice detect for OSPs
68 Set up return code table
02 If DTMF "B" is detected, splash back

4.25 Macro 32 AMNEX 800 0- Access #2

30 Initialize dialing sequence
26 Add NPA
76 Dial OSP 800 access number #2 (Register 322)
46 Set up 35 second reroute timer
25 Say "One moment please"
31 Wait for progress tone
47 Fast dialing speed 75ms/75ms
77 Dial OSP authorization code #2 (Register 323)
38 Wait 1 second
70 Dial destination number
36 Special voice detect for OSPs
68 Set up return code table
02 If DTMF "B" is detected, splash back

4.26 Macro 34 101XXXX Payphone Call Home

30 Initialize dialing sequence
92 IXC 101XXXX Access Number #1 (Register 325)
70 Dial destination number
34 Wait for voice, open mic., start anti-fraud

4.27 Macro 42 Auto IXC MCI SPRINT

30 Initialize dialing sequence
89 Temp RAM work buffer #2
31 Wait for progress tone
70 Dial destination number
31 Wait for progress tone
85 Dial Credit Card buffer
34 Wait for voice, open mic., start anti-fraud

4.28 Macro 44 International 1+

30 Initialize dialing sequence
94 Dial IXC access number #2 (Register 313)
65 Send DTMF "xx" (1234567890*#ABCD)
12 DTMF #=12
25 Wait, then say “One moment please”
31 Wait for progress tone, stop busy trunk reroute timer (750 ms)
75 Dial IXC authorization code #2 (Register 314)
70 Dial destination number
40 Enable handset earpiece
45 Wait for DTMF “XX”
15 DTMF “C”
15 Enable handset microphone
66 Call completion timer “XX”
01 One second
34 Wait for voice, open mic., start anti-fraud

5. LOW LEVEL COMMANDS

Low level commands are the “instructions” used in the pre-defined dialing macros and in any custom dialing macros that you create. See Section 3., *Creating Custom Dialing Macros* in *LP 5.4 Firmware Operation Manual, Volume 1, Configuration* for more information on custom macros.

The sequence of low level commands in a dialing macro determines the dialing protocol used by the payphone for the corresponding call type.

Table 4-1 Low Level Commands

Command	Description
10	Say "One moment please"
11	Say "Invalid number"
12	Disable keypad
13	Enable keypad
14	Disable handset microphone
15	Enable handset microphone
16	Splash back - dial direct
17	Reroute call to secondary service
18	Say "Please dial again." Then, hang-up.
19	Convert 1+ to 0+
20	Convert 0+ to 1+
21	Collect money
22	Correct special area dialing
23	Remove "1" or "0" and add NPA
24	Block 01 and 0809 from 1-800 manual IXC calls
25	Wait, then say "One moment please"
26	Add NPA
27	Report the previous SMDR for Service Desk
28	Next digit is Service Desk credit
29	Look for 2.5 seconds of progress tone
30	Initiate dialing sequence
31	Wait for progress tone, stop busy trunk reroute timer (750ms)
32	Wait for voice, open mic., SIT det., anti-fraud, enable keypad
33	Voice detect for Non Sent Paid (no coinage) calls
34	Wait for voice, Open mic., start anti-fraud, disable keypad.
35	Start answer detect for IXC (if ringbacks are detected)
36	Voice detect for OSPs

Table 4-1 Low Level Commands (Continued)

Command	Description
37	Wait for XX seconds. This is a two-part command (37 XX), where XX is time in seconds.
38	1 second wait
39	Skip the next command conditionally
40	Enable handset ear piece
41	Wait for Bong, send credit card #
42	Wait for Dial Tone Bong, send credit card in 1 second
43	Wait for Bong, send credit card
44	Wait for DTMF "#"
45	Wait for DTMF "XX" (1234567890*#ABCD). This is a two-part command (45 XX), where XX corresponds to the DTMF character as follows: DTMF 1=01 DTMF 9=09 DTMF 2=02 DTMF 0=10 DTMF 3=03 DTMF *=11 DTMF 4=04 DTMF #=12 DTMF 5=05 DTMF A=13 DTMF 6=06 DTMF B=14 DTMF 7=07 DTMF C=15 DTMF 8=08 DTMF D=16
46	Set up 35 second reroute timer
47	Fast dialing speed (75ms/75ms)
48	Slow dialing speed (100ms/75ms)
50	Remove expiration date from CCC
51	Wait 1/2 second
54	Start Coin Line processing
55	Voice detect for Coin Line. This is a two-part command (55 XX), where XX is call completion timer, in seconds, for non-coin call counters and SMDR creation
56	Set local Coin Line initial rate
59	Send credit card buffer in 1 second
61	Say a word of voice in DL
62	Start looking for wink in XX seconds. This is a two-part command (62 XX), where XX is time in seconds.
63	Block 0- converted to 01 with "#"
64	Send DTMF "#"

Table 4-1 Low Level Commands (Continued)

Command	Description
65	Send DTMF “XX”. This is a two-part command (65 XX), where XX corresponds to the DTMF character to be sent as follows: DTMF 1=01 DTMF 9=09 DTMF 2=02 DTMF 0=10 DTMF 3=03 DTMF *=11 DTMF 4=04 DTMF #=12 DTMF 5=05 DTMF A=13 DTMF 6=06 DTMF B=14 DTMF 7=07 DTMF C=15 DTMF 8=08 DTMF D=16
66	Call completion timer. This is a two-part command (55 XX), where XX is time in seconds.
67	Re-route to Service Desk
68	DTMF Return Code "XX". This is a two-part command (68 XX), where XX specifies the following: “01”=If DTMF "#" is detected, send credit card buffer. “02”=If DTMF "B" is detected, splash back. “04”= If DTMF "*" is detected, say previous call number and charges. If DTMF"A, B, or D” is detected, payphone collects coins. If DTMF "C" is detected, payphone starts Service Desk “17"= User defined return macro (reg 306) "18"= User defined return macro (reg 307) "19"= User defined return macro (reg 308)
69	Alternate Command Set. This is a two-part command (69 XX), where the second part (XX) is an alternate command as follows: 02 = Say "Payphone, not a billable number." 03 = Special processing for AMNEX 05 = Point voice to speak locally only 10 = Say 1st recorded brand, if present 11 = Coin line Service Desk credit coin tone delay. This is a two-part alternate command (11 XX), where XX is the delay in seconds between reverse battery and sending credit coin tones.
70	Dial destination number
71	IXC 800 Access Number #1 (Register 310)
72	IXC 800 AUTH. code Number #1 (Register 311)
73	OSP 800 Access #1 (Register 319)
74	OSP 800 AUTH. code Number #1 (Register 320)
75	IXC 800 AUTH. code Number #2 (Register 314)
76	OSP 800 Access Number #2 (Register 322)
77	OSP 800 AUTH. code Number #2 (Register 323)

Table 4-1 Low Level Commands (Continued)

Command	Description
79	OSP 101XXXX Access number #1 (Register 331)
80	OSP 101XXXX Access number #2 (Register 332)
81	Dial Service Desk (Register 338)
85	Dial Credit card buffer
86	Dial Station ID number (Register 402)
91	IXC 101XXXX Access Number #2 (Register 328)
92	IXC 101XXXX Access Number #1 (Register 325)
94	IXC Access Number #2 (Register 313)

Glossary

ACTS Acronym for Automated Coin Toll Service. The ACTS provides rating and supervision of toll coin calls for Coin line service.

answer detect The ability to determine when a call is answered. The payphone can be programmed to use answer detect to determine when to collect or refund coins. Answer detect is also referred to as " answer supervision" and "voice detect."

answer supervision The ability to determine when a call is answered. The payphone can be programmed to use answer supervision to determine when to collect or refund coins. Answer supervision is also referred to as " answer detect" and "voice detect."

B-1 Line A loop-start telephone line commonly used for Smart payphone operation. Payphones operating on a B-1 line must perform rating, routing, and answer supervision.

backup To make copies of data and programs to insure against accidental loss.

coin line A type of telephone line commonly used for dumb payphone operation. Payphones operating on a coin line rely on the central office for rating, routing, and coin disposal (answer supervision).

corridor A corridor call is a local call that crosses InterSTATE and/or IntraSTATE NPA boundaries. This type of call may have different pricing and/or dialing patterns from a regular local call. Corridor calling may be defined by LEC tariffs or by FCC tariffs.

current The flow of electricity, measured in amperes.

default A value which is in effect initially and/or in the absence of a user-specified value.

dialing pattern The order and sequence of digits dialed by a telephone user and used by the telephone equipment to route the call.

disable To turn OFF a smart payphone option.

discount period Period of time during which less than the full price of a call may be charged.

downloading The process of sending data or complete files from the network management system to the payphone or from the Elcotel internet website to the network management system.

DTMF Abbreviation for Dual Tone Multi-Frequency signals, which are analog signals created by telco equipment, a keypad or "TCU" (touch call unit), or a pocket dialer.

Enable To turn ON a smart payphone option.

EEPROM Acronym for Electrically-Erasable Programmable Read-Only Memory. This memory chip is similar to an EPROM except that this memory chip can be erased and reloaded after receiving an electronic signal, either through voice telemetry or by using PNM in modem telemetry.

EPROM Acronym for Erasable Programmable Read-Only Memory. This memory chip can be erased and reprogrammed, but only by a special process in a factory setting. Once programmed, it is non-volatile; that is, loss of power does not cause loss of data.

exchange A telco switching center identified by a three-digit prefix (NXX). All telephones within the exchange usually share the same schedule of charges.

FCC (Interstate) Refers to telephone rates regulated by the Federal Communications Commission for calls which cross state borders.

file A collection of related records treated as a unit.

frequency The number of repetitions per unit of time of a complete waveform, as of an electric current. Frequency is measured in Hertz.

handset The hand-held unit that contains the payphone receiver and microphone.

hertz (Hz) A unit of frequency equal to one cycle per second.

hookflash A momentary “on hook” signal.

hookswitch A switch that is actuated by the removal of the handset from its hanger. An “off-hook" status signals the TCU terminal board to open the line, returning dial tone to the receiver. "On-hook" status signals the TCU to close the line.

hybrid A mode of payphone operation for coin line applications in which the payphone can be config-

intraLATA Refers to calls within the same LATA (Local Access and Transport Area). These calls are carried by the Local Exchange Carrier (LEC).

Interstate (FCC) Refers to telephone rates regulated by the Federal Communications Commission for calls which cross state borders.

IXC Abbreviation for Inter-exchange Carrier, a company that carries telephone communications from one LATA to another.

LATA Local Access and Transport Area, a calling area that reflects common social and economic communities of interest and does not necessarily correspond with exchange (NXX), area code (NPA), or political boundaries.

LEC Acronym for Local Exchange Carrier, a company that administers telephone service in a city or town and surrounding area, typically including one or more COs and associated switching equipment.

loading The process of putting a file or a program into usable space in a computer.

local calling area A telephone industry term referring to a group of prefixes that can be called locally from a given NPA-NXX. Local calling areas are based on communities of common interest rather than mileage. Each local calling area has strict pricing and dialing pattern definitions established by the LEC.

low level command A single instruction that the PCM and operating system can execute. A low level command causes the payphone to perform an action related to the protocol involved in placing a call, such as “enable keypad”, “initiate dialing sequence”, “start answer detect”, and so on.

macro A set of low level commands to be executed in sequence. In a smart payphone, a dialing macro establishes how and when to send digits to the CO for each call type.

megabyte (Mb) 1024 kilobytes (1,048,576 bytes) of data or program storage space.

microprocessor The central processing unit (CPU) of a personal computer or smart payphone.

modem A device that converts digital signals, as from a computer, to analog wave signals for the purpose of transmission over telephone communication channels. The modem MOdulates the signal at one end, then DEModulates at the other end of the transmission. Modem telemetry enables the network management system to payphone communication linkage.

modem telemetry The transmission of modulated digital data (in analog form) over a communication channel. The process requires a modem at each end of the communication channel. Modem telemetry is the method the payphone network management system operator uses to create a communications link with the payphone and vice versa.

noise Interference or unwanted sound on a line which can be the result of proximity to other lines or electrical devices, transmission of other electrical devices sharing the same line, or the result of CO switching equipment.

NPA Abbreviation for Numbering Plan Area. Also known as Area Code, an NPA is the three-digit number that precedes the seven-digit telephone number. NPAs are assigned to a major North American geographical areas, including Canada, USA, Mexico, Bermuda, the Bahamas, and Puerto Rico.

NXX The three-digit prefix, preceding the subscriber number (NPA NXX-XXXX). NXX is often, but not always, related to an exchange.

OCC Abbreviation for Other Common Carrier, a non-telco carrier such as MCI or Sprint.

off-hook The condition when the handset is removed from the cradle.

option A program switch (identified by a three-digit number) that enables or disables a payphone feature depending whether the option is set ON or OFF, respectively.

owner bypass code A code used by the owner-operator to access the voice telemetry mode, allowing a person to program and/or test the payphone.

OSP Abbreviation for Operator Service Provider.

PBX Abbreviation for Private Branch Exchange, a telephone switching system usually located on the owner's premises. PBX encompasses a wide variety of equipment that can provide intra-premises telephone service as well as access to public telephone networks.

PCM Abbreviation for Payphone Control Module. In the Elcotel smart payphone, it is the circuit board assembly that contains the microprocessor, EPROM, EEPROM, RAM and other electronic elements.

Permissive Dialing, Permissive NPA Refers to temporarily allowing use of both the “original” and “split” NPA in dialing patterns during a “permissive” period when an NPA is split.

PIC Acronym for Preferred Inter-Exchange Carrier, a term used to identify the owner-operator's preference of an IXC.

polarity Related to the direction of the current in the telco circuit. Some payphone equipment is polarity sensitive; that is, the Tip and Ring must be correctly identified and wired for the equipment to function.

polling The process of calling a phone, or a group of phones, from a personal computer, using the network management system.

premium period The period of time when a telephone call is charged at the full rate, as opposed to the "discount period."

protocol A required or agreed upon sequence of interaction. In telephony, the required interaction to place a call. In modem communications, the required interaction to establish a telecommunications session and exchange data.

prompt Refers to the digitized voice phrases a smart payphone uses to communicate with a user.

pulse dialing Also known as rotary dialing, the dialing mechanism breaks the current loop, and the number of pulses per second that this occurs is equivalent to the digit dialed. This is one method of sending the number to the CO.

RAM Acronym for Random Access Memory, the working memory or temporary storage area in Pcs and smart payphones. Data stored in RAM, without battery backup, is lost if power is removed.

RAM Reload command Causes the backup data stored in the EEPROM chip to be loaded into Random Access Memory for use by the payphone operating system.

record A set of one or more consecutive data on a related subject. For example, a payphone master record consists of an ID number, a phone number, location name, location description, and so on.

red box A device used on coin line phones to fraudulently simulate coin deposit tones through the handset microphone.

register A place in computer memory for storing a value that is used by a payphone feature. A unique three-digit number identifies each register.

remote Usually refers to a location away from the main computer in a network. Remote systems are connected to the main computer by communication channels. Remote terminals are located at a distance from the main computer. Remote data from a phone in the network can be imported to the PC by using the payphone network management system. However, with smart payphones, activity performed through the keypad at the payphone site is referred to as local, for example, local voice telemetry.

Reverse Battery Answer Supervision (RBAS) A form of answer supervision by which the polarity of the tip and ring changes when an answer is detected (the call is completed).

Ring The second wire in the telco pair. Normally, the red wire in the pair of wires which makes the talking circuit in the telco line. named for being connected through the outer or “ring” portion of a manual telephone patchboard plug. Also, the signaling of an incoming call by a telephone through a “ringer” device. (Sometimes referred to as “one ringy dingy”.)

S94 File Speed dial file. This file, containing "quick access" telephone numbers can be downloaded to the payphone. The user can access them by entering * [two digits].

secondary dial tone Dial tone sometimes restored by the Central Office after called-party hang up but without a hookswitch transition (on-hook/off-hook) by the calling phone.

Service Desk™ A feature of Elcotel payphones which allows credit to be issued to customers while they are on the line.

SIT Acronym for Special Information Tone, a three-tone sequence preceding a telco interrupt message, such as "This call cannot be completed as dialed."

site operational files The files that are downloaded to a payphone to allow it to operate properly at its site. The minimum that must be downloaded to a phone are the register and options template and an R94 file. The P94, S94 and V94 files can be downloaded to provide value added features.

site specific block A collection of data, unique to each payphone, extracted from the payphone database in the payphone network management system and downloaded to the payphone.

smart mode A mode of payphone operation for B-1 COCOT line applications in which the payphone is configured to use its internal capability to handle call rating, routing, and answer supervision. Rate table maintenance is required for this mode of operation.

SMDR Abbreviation for Station Message Detail Records, which are call data detailing the number dialed, date, time, duration of the call, price, credit card information, and so on. SMDR are stored and uploaded for viewing and evaluation. SMDR are sometimes called “Call Detail Records” (CDR).

splash back The action that occurs when a call that was originally placed with an OSP can’t be handled by the OSP for whatever reason and is returned or “splashed back” to the LEC or local operator for handling.

TELCO The operating TELephone COmpany.

Tip The first wire in the telco pair. Normally, the green wire in the pair of wires that is the talking circuit of a telephone line. Named for being connected through the center or “tip” of a manual telephone patchboard plug.

trigger level In some instances, values in a register can be changed to reflect the owner-operator requirements for setting or "flagging" an alarm condition. For example, the Cash Vault Alarm Trigger is an adjustable dollar amount. When the sum in the cash box exceeds the amount, the alarm is set.

uploading The process of transferring data or complete files from a payphone to the payphone network management system.

validation The process of verifying the legitimacy of a credit card.

V94 file A file containing the payphone operating system software. The PGM file can be downloaded to the phone when new features are added.

voice detection The ability of the payphone to identify the end of ringback and the beginning of voice answer.

voice telemetry A technique by which the payphone can be programmed by using DTMF tones, that is, by entering a series of digits at a touch keypad. Note that this method is an alternative to communications via modem telemetry.

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