

### The Call Record Databases

The databases that store call records are independent of one another. In the example above, you erase data stored in the databases that generate the Night Audit Activity and Summary Reports on a daily basis. You only erase the data stored in the database generating the Profit Report once a month, however. This is because of the independent nature of the call record databases.

Below is a list of reports which prompt memory management decisions. Each report is generated by data contained in a particular database. Remember, these databases are independent of one another. The databases are listed to the right of the report name.

Report Name	Related Database(s)
* Guest Check-Out	Guest station activity
Night Audit Activity ✓	Guest station activity
Night Audit Summary ✓	Guest station summary
Profit Report	Profit summary
Station Activity ✓	Administrative station activity
Station Summary ✓	Administrative station summary
Network Summary	Guest Activity & Summary Administrative activity Administrative summary

\*Erasing Guest Check-Out activity does not affect the Trunk/Line Utilization Report (36).

The following examples illustrating how memory management decisions affect the call record databases.

#### Example

Guest station call records -- room number, number dialed, time, length, and cost of call -- are stored in the guest station activity database (see above). Let's say you clear this database every time you run a Night Audit Activity Report and erase the data.

Some information about those very same calls is stored in the guest activity database (see above). The trunk, for example, over which the guest calls were made is stored in this database. This is why you can run a Night Audit Activity Report and erase the data every night, and still get complete trunk utilization from the Network Summary Report on a monthly basis.

#### Example

Let's say a guest stays four nights at your hotel. Each night you run a Night Audit Activity and Night Audit Summary Report and erase the data. The morning of the fifth day, your guest makes three long distance calls before checking out.

When the guest checks out, run a Guest Check-Out Report and erase the data. The Report only includes guest station activity data collected since the time you printed the Night Audit Activity Report and erased the data. You can add the total from the Guest Check-Out Report to the guest's bill.

That night, when you run the Night Audit Summary Report, the total for the guest you checked out will be listed under the column PRIOR GUEST CHARGES. This information is stored as guest station summary data.

What is important to remember is that the PL stores call records according to the reports in which they're used. When the PL prompts you for an activity memory management decision after printing a Guest Check-Out Report, it is prompting you to save or erase guest station activity data only. After printing a Station Summary Report, the PL prompts you to save or erase administrative station activity and summary data only.

#### Multiple Memory Management Decisions

It is not unusual to print more than one report at a time. The PL always prompts you for activity memory management decisions first, then summary memory management decisions. The code window prompts you in addition to the activity data/summary data lights shown on page 4.2. Below is a list of the reports which prompt memory management decisions. To the right of each report name is the prompt that appears in the code window when it is time to make a memory management decision.

Report Name	Code Window Prompt
Guest Check-Out Report	-G
Night Audit Activity Report	-S
Night Audit Summary Report	-S
Profit Report	-P
Call Record Deletion	SS
Station Activity Report	-A
Station Summary Report	-S
Network Summary Report	--

"-P" flashes in the code window after you print a Profit Report. This is a reminder: you are saving or erasing profit summary data.

"-A" flashes in the code window after you print a Station Summary Report. This is a reminder: you are saving or erasing administrative station activity and administrative station summary data.

There is no specific prompt (--) for the Network Summary Report. This is the only report that includes activity and summary data for all the stations in your telephone system.

---

#### Memory Management Procedures

The procedure for making memory management decisions is on page 4.11. Follow it carefully but keep in mind that if you press CANCEL accidentally, all is not lost. Pressing CANCEL, then CONFIRM saves the data. If you really wanted to erase the data, read on.

There are two Clear Memory selection codes that allow you to erase activity and summary data. Be careful! The Clear Memory functions do not discriminate between guest and administrative activity data, for example. The Clear Summary Memory function -- selection code 95 -- clears guest summary data, administrative summary data, and profit summary data. These are time saving steps, but not to be taken lightly!

To erase activity data, enter the selection code 94 and press ENTER. To erase summary data, enter the selection code 95 and press ENTER. In both cases, the buzzer will sound and CONFIRM must be pressed twice.

Be sure that you have a copy of all the reports you are going to need for the current report period before you make any memory management decision. Once you make it, it's final!

The PL waits indefinitely for you to make a memory management decision. Once your reports finish printing, the activity/summary data lights remain on, waiting for your decision.

The Auto Print Report is the only process that interrupts a memory management decision. An Auto Print Report will start printing at the time you program into the Auto Print Database. The PL allows a five minute period to elapse before starting the Auto Print if memory management is in progress.

---



A final reminder: Make sure you print all the reports you are going to need for a given report period before you make a memory management decision or use the clear memory functions.


To make an activity or summary memory management decision,

The PL...

You...


- ACTIVITY  
1  SUMMARY flashes.


 and  flash.

- 2 Press  to store the data.

Or, press  to erase the data.

- 3 If you pressed SAVE,  
 ACTIVITY and  remain lit.


If you pressed ERASE,  
 ACTIVITY and  remain lit.

- 4  flashes.

Before you press CONFIRM, you can alternate between SAVE and ERASE as often as you like.

The decision is final once you press CONFIRM.

- 5 Press  if you're sure.

Or, press  if you're not sure.

Section 5/Guest Check-Out Procedures





Section 5/Guest Check-Out Procedures

Introduction.....	5.1
The Guest Check-Out Report.....	5.1
To Check a Guest Out.....	5.5
Deleting a Call Record.....	5.7
To Delete a Call.....	5.8



---

Introduction

Check guests out easily and accurately using the Guest Check-Out Report. The Guest Check-Out Report provides you with a complete list of each guest's calling activity.

A guest can make a call up until the last minute before checking out. That last call will be included on the Guest Check-Out Report. You don't have to worry about lost calls or inaccurate costing. The report lists every call made by the guest during his stay. And the cost associated with each call includes your mark-up.

---

The Guest Check-Out Report 50

The total on the Guest Check-Out Report represents the cost of all the calls made from that guest room since the last time you erased guest station activity data. In most cases, this means the report includes all calls made since the last time you ran the Night Audit Activity Report and erased the data.

The data window displays the total from the Guest Check-Out Report. You have the option of posting this total to another bill or printing a detailed Guest Check-Out Report and presenting that to your guest.

Look at the sample Guest Check-Out Report on page 5.6. The report heading lists the guest's room number and the date and time of check-out. The DATE column indicates the length of the guest's stay. Most importantly, the report lists the number dialed and cost for each call.

## Section 5/Guest Check-Out Procedures

The PL differentiates between local, long distance, operator assisted, directory assistance, 700, 800, and 900 calls. International calls are included in long distance. The total number and cost of calls are listed for local, long distance, and OTHER. OTHER includes:

- Operator assisted calls
- Directory assistance calls
- 700 calls
- 800 calls
- 900 calls

The Guest Check-Out Report flags special types of calls. These "flags" are referred to as call identifiers. The call identifiers are:

- CC Credit Card call.
- IV Invalid call.
- OA Operator assisted call.
- \*X Equal access call.
- \* Dial-up OCC call.
- IN Direct-dial international call.
- IO Operator assisted international call.
- RM Guest station to guest station call.
- # Call made by another station and billed to the station listed on the report.
- L Local call. (This appears after the dialed digits of local calls and only in Guest Check-Out (50) and Night Audit Activity (52).

\*\*\*\*\* Field Overflow

The cost listed on the report reflects your mark-up. The call rating formula you design can include a percent of the standard tariff, cost per

minute, cost per call, and other surcharges. See Section 2/Call Rating for a description of the standard tariff and other charges you can add to the cost of telephone services.

Notice the listing of federal, state, and local taxes below the TOTALS line. The final figure reflects the total cost to your guest. Add this figure to previously posted telephone charges or, present this as the bill.

---

The Guest Check-Out Report prompts a guest station activity memory management decision. If, for some reason, you are just checking totals, you will want to save the activity data. When a guest checks out, however, it is standard procedure to erase the activity data. The procedure below details how to do this.

When you save or erase data after printing a Guest Check-Out Report, you are only affecting guest station activity data. This guest station activity memory management decision does not affect the following types of data:

- Guest station summary data.
- Administrative activity data.
- Administrative summary data.
- Profit Report data.

This allows you to check a guest out at 11:30 AM, check a new guest in at 1:00 PM, and retain an accurate record of number of calls, total charges for each guest, and profit dollars.

The Trunk/Line Utilization Report is an exception worth noting. This report includes both guest and administrative activity and summary data. The Trunk/Line Utilization Report prompts guest and administrative activity and summary memory management decisions. Erasing guest activity data after printing a Guest Check-Out Report has no affect on the Trunk/Line Utilization Report.

Here's a special note: after call records have come in for a specific station, the station can be re-programmed from an administrative station to a guest station. Since the profit database is maintained as the call records come in, and the totals for the other lodging reports are computed as the report is printed, there could be a discrepancy between the profit report and the guest check-out reports for example.

The selection code for the Guest Check-Out Report is 50. See the procedure for printing this report on the next page.

Station selection  
code for  
will  
check  
to erase the  
details how to

Guest  
report  
activity  
effect

AN  
retain an  
check


exception  
and  
The  
and  
activity data  
report has  
report

## To Check a Guest Out,


You...



The PL...


1 Enter the selection code for the Guest Check-Out Report -- 50.

2 Press  .



4 Enter the room number.



5 If correct, press  .

If you've made a mistake, press  . Then, re-enter and press  .

7 Press  to print the report. Then, save or erase the data.


OR, post the total from the data window to the guest's bill. Then, save or erase the data.

8 Press  then  to erase the data.

OR, press  then  to save the data.

3 Displays five cursors in the data window. This is your prompt to enter the room number.

6 Displays a 50 in the code window and total charges in the data window.

 ,  , and  flash.

Section 5/Guest Check-Out Procedures

The Guest Check-Out Report looks like this:

GUEST CHECK-OUT REPORT (50)

ROOM #	275	03/24/87	12:05 PM				
SEQ	DATE	NUMBER	PLACE	TIME	LENGTH	COST	
000001	07/14	212-546-9670	NY	8:30 AM	1.8	\$	3.33
000005	07/14	411	MA	12:38 PM	0.6	\$	2.35
000013	07/15	703-981-7350	VA	11:30 AM	6.1	\$	3.45
000015	07/15	744-4700 L	MA	3:25 PM	4.5	\$	.87
000018	07/16	DA 904-356-2400	FL	11:20 AM	4.6	\$	1.00
000025	07/17	475-2341	MA	8:25 AM	24.3	\$	17.69
000033	07/19	904-359-2640	FL	9:00 AM	0.3	\$	2.98
000034	07/19	745-2330 L	MA	10:45 AM	3.6	\$	.87
000036	07/19	818-223-5109	CA	12:35 PM	6.0	\$	3.35
000038	07/19	652-7614	MA	3:39 PM	4.2	\$	1.39
000042	07/20	IN 39-41562731	Italy	9:08 AM	24.2	\$	43.10
000045	07/20	498-1000	MA	2:38 PM	11.7	\$	8.24
000048	07/14	212-546-9670	NY	8:30 AM	1.8	\$	3.33
000052	07/14	411	MA	12:38 PM	0.6	\$	2.35
000060	07/15	703-981-7350	VA	11:30 AM	6.1	\$	3.45
000062	07/15	744-4700 L	MA	3:25 PM	4.5	\$	.87
000065	07/16	DA 904-356-2400	FL	11:20 AM	4.6	\$	1.00
000072	07/17	475-2341	MA	8:25 AM	24.3	\$	17.69
000080	07/19	904-359-2640	FL	9:00 AM	0.3	\$	2.98
000081	07/19	745-2330 L	MA	10:45 AM	3.6	\$	.87
000083	07/19	818-223-5109	CA	12:35 PM	6.0	\$	3.35
000085	07/19	652-7614	MA	3:39 PM	4.2	\$	1.39
000089	07/20	IN 39-41562731	Italy	9:08 AM	24.2	\$	43.10
000092	07/20	498-1000	MA	2:38 PM	11.7	\$	8.24
				LOCAL -	4	16.2	\$ 3.48
				LONG DISTANCE -	14	1:48.8	\$ 80.86
				OTHER -	6	58.8	\$ 92.90
				TOTALS	24	3:03.8	\$177.24
				FEDERAL TAX -			\$ 1.32
				STATE TAX -			\$ 3.83
				LOCAL TAX -			\$ .18
				TOTAL			\$182.57



Deleting a Call Record

You can delete individual call records from both the activity and summary databases. This comes in handy if, for example, a guest claims that a call is not his. To appease your guest, delete the call. Follow the procedure outlined below.

Once a call is deleted, it is gone from all reports including both Night Audit reports.

The PL immediately updates the activity and summary databases. Any report you call up after deleting a call record will be accurate.

You'll need the call's sequence number to delete it. Every call made in your establishment -- guest and administrative -- has a sequence number. Read the sequence number from the left-most column of the Guest Check-Out Report. See the sample report on page 5.6.

---

The selection code for the Call Record Deletion Function is 55. See the procedure for deleting call records below.


Procedure 5.8 To Delete a Call

To Delete a Call,

You...


The PL...

1 Enter the selection code for the Call Record Deletion -- 55.



2 Press  .

3 Displays six cursors in the data window. This is your prompt to enter the sequence number.


4 Enter the sequence number.

5 If correct, press  .

If you've made a mistake,


press  . Then, re-enter and press  .

6  and  flash.

7 Press  to delete the call record. Then press



OR, if there's been a

mistake, press  and



*Section 6/Night Audit Procedures*

---



Section 6/Night Audit Procedures

Introduction.....	6.1
Night Audit Activity Report.....	6.3
Night Audit Summary Report.....	6.6
To Print Night Audit Reports.....	6.9
Profit Report.....	6.10
To Print the Profit Report.....	6.13



---

Introduction

The Night Audit Activity and Summary Reports are helpful accounting tools. You can use the Night Audit Activity Report to post telephone charges to guest folios. The Night Audit Summary Report lists prior as well as current guest charges. Prior guest charges belong to guests who already checked out. Use this information to check your cash receipts.

This section treats the Night Audit Activity and Night Audit Summary Reports together. You should print the reports together. This is because the PL continuously collects call records. Waiting, even a few minutes, between the time you select the Night Audit Activity and Night Audit Summary Reports, allows the PL to collect new call records. These new call records will be included in the second report you select, but not in the first. To avoid the resulting discrepancies in activity and summary data, select the Night Audit Activity and Night Audit Summary Reports together!

Please note: the PL software is designed around standard lodging accounting procedures. Run reports at night and clear totals. If you do not, some reports may take longer to print than others.

---

The PL prompts you for memory management decisions after these two reports print. The Night Audit Activity Report prompts an activity memory management decision. The Night Audit Summary Report prompts a summary memory management decision. Print these reports together and erase the data when you're done. This procedure keeps the reports useful.

You can save the data after printing the Night Audit Activity and Summary Reports. If you do, you will extend the report period. The reports will no longer be useful as daily records of guest station calling activity. See Section 4/Saving and Erasing Memory if you're confused about this point.

The reports listed in this section flag special types of calls. These "flags" are referred to as "call identifiers." The call identifiers are:

- CC Credit Card call.
- IV Invalid call.
- OA Operator assisted call.
- \*X OCC call.
- \* Dial-up OCC call.
- IN Direct-dial international call.
- IO Operator assisted international call.
- RM Guest station to guest station call.
- # Call made by another station and billed to station listed on report.
- L Local call. (This appears after the dialed digits of a local call and only in Guest Check-Out (50) and Night Audit Activity (52).
- \*\*\*\*\* Field Overflow



---

Night Audit Activity Report 52

The Night Audit Activity Report is a detailed listing of guest room calling activity. The Night Audit Activity Report typically covers a period of one day. Each night, when you perform your night audit, post the day's charges and clear the call record database for this report. Clearing the call record database starts a new report period. New calls coming in will be listed on the Night Audit Activity Report you run tomorrow night.

Your guest may not stay another night. In that case, all calls made from the time you perform your night audit to the time the guest checks out, will be listed on the Guest Check-Out Report. Add the total from the Guest Check-Out Report to the charges you have already posted to the guest's folio using the Night Audit Activity Report(s). You can be sure you are presenting your guest with a complete and accurate bill for telephone services.

---

The selection code for the Night Audit Summary Report is 51. The procedure for printing the Night Audit Summary Report is shown on page 6.9.

---

Look at the sample Night Audit Activity Report on page 6.5. The sample shows you the first page of the report; it details calling activity for room number 275. The report heading lists the room number, today's date, and the time.

## Section 6/Night Audit Procedures

The report lists the number dialed and cost for each call. International calls are included in long distance. The total number and cost of calls is listed for local, long distance, and OTHER. OTHER includes:

- Operator assisted calls
- Directory Assistance calls
- 700 calls
- 800 calls
- 900 calls

The TOTAL COST listed on the report includes your mark-up. Your mark-up is determined by the values you program into the call rating and surcharges databases. See Section 2/Call Rating for a description of the standard tariff and other charges you can add to the cost of telephone services.

Notice the listing of federal, state, and local taxes below the TOTALS line. The final figure reflects the cost to your guest today. This is the figure you will post to the guest's folio.



Night Audit Summary Report 51

The Night Audit Summary Report gives you an up-to-date listing of total telephone charges by room number. The report is especially helpful because it distinguishes between prior and current guest charges. This report tells you two things:

1. PRIOR GUEST CHARGES. Telephone charges already paid by the guest who checked out of the room (listed in the ROOM NUMBER column) earlier today.
2. CURRENT GUEST CHARGES. Telephone charges not yet paid by the new guest in that same room.

The selection code for the Night Audit Summary Report is 51. The procedure for printing the Night Audit Summary Report is shown on page 6.9.

The report heading lists the date and time you are running the report. The number and cost of local and long distance calls are listed for each room number. International calls are included in long distance. TOTAL CALLS reflects the number of local, long distance, and OTHER calls. OTHER includes:

- Operator assisted calls
- Directory assistance calls
- 700 calls
- 800 calls
- 900 calls

TOTAL CHARGES reflects the money you've made on telephone service for the report period. The report period typically covers one day. The total shown for PRIOR GUEST CHARGES should equal cash receipts for the day.

Let's look at the sample report on page 6.8 by room number:

-- Room 1332 --

TOTAL CHARGES equals CURRENT GUEST CHARGES. No PRIOR GUEST CHARGES means the current guest in room 1332 was here yesterday or, the prior guest had no phone charges.

-- Room 1333 --

No LOCAL CALLS, no LONG DISTANCE calls. TOTAL CALLS equal 4. These calls fall under the category "other." "Other" calls are directory assistance, operator assisted, 800, or 900.

These four calls to "other" cost the guest \$12.15. The guest who checked-out earlier had telephone charges for today of \$8.22. This figure should be included in today's cash receipts.

-- Room 1334 --

This is pretty straight forward. No calls to "other," only one guest in the room today.

-- Room 1335 --

The current guest has made three long distance calls and one "other." CURRENT GUEST CHARGES are \$12.94. The guest who checked out earlier had telephone charges today of \$12.34. This figure should be included in today's cash receipts.

Section 6/Night Audit Procedures

The Night Audit Summary Report looks like this:

Night Audit Summary Report (51)

REPORT PERIOD  
01/06 TO 01/07

TIME: 11:45 PM

ROOM NUMBER	LOCAL CALLS		LONG DISTANCE		TOTAL CALLS	TOTAL CHARGES	PRIOR GUEST CHARGES	CURRENT GUEST CHARGES
	NUMBER	COST	NUMBER	COST				
1332	2	\$ 2.45	2	\$ 11.36	5	\$ 15.65	\$ 00.00	\$ 15.65
1333	0	\$ 00.00	0	\$ 00.00	4	\$ 20.37	\$ 8.22	\$ 12.15
1334	1	\$ 00.76	10	\$ 75.98	11	\$ 76.74	\$ 00.00	\$ 76.74
1335	0	\$ 00.00	3	\$ 12.94	4	\$ 25.28	\$ 12.34	\$ 12.94
<b>TOTALS</b>	<b>3</b>	<b>\$03.21</b>	<b>15</b>	<b>\$100.28</b>	<b>24</b>	<b>\$138.04</b>	<b>\$ 20.56</b>	<b>\$117.48</b>

To print the night audit reports and make memory management decisions...

You...

The PL...

- 1 Enter the selection code 52.

Press



- 2 Enter the selection code 51.




Press






- 3 Press



- 4 The reports print:  
51 first, then 52.

- 5  displays the code 52.  and  flash.

- 6 Erase the guest station activity data for the Night Audit Activity Report.

- 7  displays the code 51.  and  flash.

- 8 Erase the guest station summary data for the Night Audit Summary Report.

The Profit Report allows you to compare the following:

- 1 AMOUNT BILLED -- the amount your guest pays for these services. This figure includes your mark-up.
- 2 ACTUAL COST -- the amount you actually spend providing telephone services for your guests.
- 3 PROFIT DOLLARS -- your mark-up.

$$\text{AMOUNT BILLED} - \text{ACTUAL COST} = \text{PROFIT DOLLARS}$$

- 4 PROFIT % -- the percent of the AMOUNT BILLED that is profit to you.

$$\frac{\text{PROFIT DOLLARS}}{\text{AMOUNT BILLED}} = \text{PROFIT \%}$$

The report helps you determine if your mark-up is sufficient for local, long distance, and all OTHER calls. International calls are included in long distance. OTHER includes:

- Operator assisted calls
- Directory assistance calls
- 700 calls
- 800 calls
- 900 calls



Your mark-up is determined by the values you program into the call rating and surcharges databases. See Section 2/Call Rating for a description of these databases.

---

The selection code for the Profit Report is 53. The procedure for printing the Profit Report is shown on page 6.11.

The Profit Report prompts a profit summary memory management decision. You can save or erase the profit summary data when this report finishes printing. Erase the data when you want to begin a new report period. Erasing profit summary data has no effect on other guest or administrative station databases. See Section 4/Saving and Erasing Memory for more on memory management.

Here's a special note: after call records have come in for a specific station, the station can be re-programmed from an administrative station to a guest station. Since the profit database is maintained as the call records come in, and the totals for the other lodging reports are computed as the report is printed, there could be a discrepancy between the profit report and the guest check-out report for example.

Section 6/Night Audit Procedures

The Profit Report looks like this:

Profit Report (53)

REPORT PERIOD  
01/06 TO 01/07

	# CALLS	TOTAL LENGTH	AMOUNT BILLED	ACTUAL COST	PROFIT DOLLARS	PROFIT %
LOCAL	14	1:43.8	\$ 5.76	\$ 2.04	\$ 3.72	+ 64.6%
LONG DISTANCE	55	11:39.0	\$163.94	\$127.28	\$ 36.66	+ 22.4%
OTHER	39	5:25.7	\$ 32.69	\$ 20.67	\$ 12.02	+ 36.8%
<b>TOTALS:</b>	<b>108</b>	<b>18:47.15</b>	<b>\$202.39</b>	<b>\$149.99</b>	<b>\$ 52.40</b>	<b>+ 25.9%</b>

To print the Profit Report and make  
the memory management decision...

You...

The PL...

- 1 Enter the selection code 53.




Press



- 2 Press



- 3 The report prints.

- 4  displays the code 53. flash.  and 

- 5 Erase the summary data  
for the Profit Report.



*Section 7/Administrative Reports*

---



Section 7/Administrative Reports

Introduction.....7.1  
Station Activity Report.....7.1  
Station Summary Report.....7.3  
Department Summary Report.....7.4  
Company Summary Report.....7.6





## Section 7/Administrative Reports

---

### Introduction

The Station Activity and Station Summary Reports help you track telephone use by your administrative staff. These reports only include administrative station call records.

---

### Station Activity Report 20

The Station Activity Report lists every call made from/to every administrative station in the system. This report provides you with a detailed listing of telephone activity. It lists the time spent on the phone, the cost of calls made, and the number called, all by station number.

Station numbers are automatically included in the call records. You do, however, have to program the Station Database to generate this report. The Station Database allows you to differentiate between guest and administrative stations. See pages 11.25 - 11.27 for a complete description of the Station Database.

Data overflow can occur. This happens when the PL receives a call for a station number greater than the system capacity for your system. In this case, the station number field (on any report) is prints \*\*\*\*\* instead of a value.

For the procedure to print a Station Activity Report, see page 3.3.

The Station Activity Report prompts an administrative station activity memory management decision.

Section 7/Administrative Reports

The Station Activity Report looks like this:

REPORT PERIOD  
01/06 TO 01/06

STATION ACTIVITY REPORT (20)

STATION 100

PAGE 1

DATE OF CALL	NUMBER DIALED	PLACE	TRUNK USED	TIME OF CALL	LENGTH OF CALL HR:MN. T	COST OF CALL	ACCOUNT CODE
01/06	413-555-1212	MA	0	6:01 PM	5.9	\$ .60	
01/06	413-648-7741	MA	0	6:10 PM	9.0	\$ 1.84	
01/06 *1	276-9952	MA	0	6:35 PM	7.8	\$ .68	
01/06	532-7709	MA	0	6:57 PM	9.7	\$ .23	
01/06	532-4873	MA	0	7:48 PM	5.8	\$ .23	
01/06	452-8624	MA	0	8:12 PM	6.9	\$ .89	
TOTALS :		NUMBER OF CALLS		6	45.1	\$ 4.47	

Station Summary Report 30

The Station Summary Report combines two of the most helpful management reports: the Department and Company Summary Reports. This report -- really two in one -- provides you with an organizational cost breakdown. Instead of making two report requests, you only have to make one. You can, however, request any of these reports individually.

Pages 7.4 through 7.7 describe the Department and Company Summary Reports in detail. When you select the Station Summary Report, both of these reports print automatically. Remember, you can print any of these reports separately.

You must program the Station Database -- selection code 68 -- if you want to make use of this report. The Station Database allows you to assign administrative stations to departments. There are 99 administrative departments to which you can assign any number of administrative stations. See pages 11.25 - 11.27 for a description of the Station Database.

To print the Station Summary Report, follow the procedure for printing reports on page 3.3. Follow this procedure to print either of the component reports individually.

The Station Summary Report prompts both an administrative station activity and administrative station summary memory management decisions. This provides you with the opportunity to print the Station Summary Report and erase the related detail (Station Activity Report) even if you don't print the Station Activity Report.

Erasing the detail makes room in the database for new call records. It is always a good idea to erase the corresponding activity data when you erase the summary data. If you do not, the activity will reflect an on-going record of calls while the summary data will not.

Department Summary Report 33

The Department Summary Report lists the calls made by the administrative stations in each department. This allows you to accurately allocate costs by department. You won't have to manually assign calls by departments. The Department Summary Report does this for you. The report only lists departments for which there has been call record activity.

Remember, the PL does not recognize departments unless you program the Station Database -- selection code 68. See page 11.25 for a description of the Station Database.

The Department Summary Report does not prompt a memory management decision.

Section 7/Administrative Reports

A Department Summary Report looks like this:

REPORT PERIOD	DEPARTMENT SUMMARY REPORT (30)				DEPARTMENT	1
01/06 TO 01/06	-----				PAGE	1
STATION	NUMBER OF CALLS	TOTAL LENGTH HR:MN. T	AVERAGE LENGTH HR:MN. T	AVERAGE COST PER CALL		TOTAL COST
100	6	45.1	7.6	\$ .75	\$	4.47
101	0	0.0	0.0	\$ .00	\$	.00
102	0	0.0	0.0	\$ .00	\$	.00
103	0	0.0	0.0	\$ .00	\$	.00
TOTALS :	6	45.1	7.6	\$ .75	\$	4.47

---

Company Summary Report 35

The Company Summary Report lists call activity by division. The Company Summary Report allows you to see, at a glance, whether or not each department is staying within their budget.

Remember, the PL does not recognize departments unless you program the Station Database -- selection code 68. See page 11.25 for a description of the Station Summary Report.

The Company Summary Report does not prompt a memory management decision.

Section 7/Administrative Reports

The Company Summary Report looks like this:

REPORT PERIOD  
07/14 TO 07/20

COMPANY SUMMARY REPORT (30)

PAGE 1

DEPARTMENT	NUMBER OF CALLS	TOTAL LENGTH HR:MN. T	AVERAGE LENGTH HR:MN. T	AVERAGE COST PER CALL	TOTAL COST
1	26	6:17.0	14.5	\$ 6.07	\$ 157.94
TOTALS :	26	6:17.0	14.5	\$ 6.07	\$ 157.94





Section 8/Guest and Administrative Reports



Section 8/Guest and Administrative Reports

Introduction.....	8.1
Network Summary Report.....	8.2
Trunk/Line Utilization Report.....	8.3
Area Code Summary Report.....	8.5
A Note About Exception Reports.....	8.7
25 Most Frequently Called Numbers Report...8.8	
25 Longest Calls Report.....	8.10
25 Most Expensive Calls Report.....	8.12
Administrative Activity Dump Report.....	8.14
Guest Activity Dump Report.....	8.17



Introduction

---

Your goal in using the PL Series Telephone Accounting System is to maximize profits on telephone services. Maintaining the most efficient telephone network possible is very important. This section describes a group of reports that will help you evaluate and maintain the services that make up your telephone network.

In examining these reports, you might reach the conclusions like these: Maybe you don't need all the trunks you currently have. Or maybe, considering the cost, you could use another 800 number. Perhaps your sales department makes a large percentage of calls to one area of the country and you need a WATS line.

All the reports described in this section include call records for both guest and administrative stations. The Network Summary Report -- selection code 32 -- is the only report in this section that prompts a memory management decision.

The Network Summary Report combines the Trunk/Line Utilization and Area Code Summary Reports. This report -- really two in one -- helps you design and monitor your telephone network. Instead of making two report requests to see this related information, you only have to make one. You can, however, request either of these reports separately.

Pages 8.3 through 8.6 describe the Trunk/Line Utilization and Area Code Summary Reports in detail. When you print either of these reports separately, they do not prompt any memory management decision.

The Network Summary Report prompts both an activity and summary memory management decision. You probably erase guest station activity and summary data on a daily basis when you print these reports:

- Guest Check-Out Report
- Night Audit Activity Report
- Night Audit Summary Report

This does not present a problem. The PL saves all trunk/line and area code data for guest stations until you make a memory management decision after printing the Trunk/Line Utilization Report.

Trunk/Line Utilization Report 36

The Trunk/Line Utilization Report lets you see the volume of calls being handled by each trunk in your network. The Trunk/Line Utilization Report, together with the other reports described in this section, gives you an accurate idea of how your trunks are being used.

Each trunk or group of trunks in your network is referred to by a trunk number. This makes it easy to track problems, as well as the success of a new strategy. Trunks that handle a low volume of calls may be unnecessary, or out of order. You can make sure that employees are making use of the special services available -- are WATS lines and Other Common Carriers being used when they should? This report would show you whether or not a new 800 number was really necessary.

Look at the sample report on page 8.4. The report heading indicates the report period. The report lists the number of calls made over each trunk. Trunks are listed in ascending order. For each trunk, the TOTAL LENGTH, AVERAGE LENGTH, AVERAGE COST PER CALL, and TOTAL COST is listed. These figures help you evaluate the worth of special services or trunks.

The Trunk/Line Utilization Report does not prompt a memory management decision unless you print it as part of the Network Summary Report. The Trunk/Line Utilization Report will reflect local and or in-coming calls (I/C) even if it has been programmed to reject them. (The purpose of tracking would be defeated otherwise.)

Section 8/Guest and Administrative Station Reports

The Trunk/Line Utilization Report looks like this:

REPORT PERIOD  
01/06 TO 01/06

TRUNK/LINE UTILIZATION REPORT (32)

PAGE 1

TRUNK NUMBER	NUMBER OF CALLS	TOTAL LENGTH HR:MN. T	AVERAGE LENGTH HR:MN. T	AVERAGE COST PER CALL	TOTAL COST
0	33	5:52.3	10.7	\$ 1.74	\$ 57.34
1230	0	0.0	0.0	\$ .00	\$ .00
1240	0	0.0	0.0	\$ .00	\$ .00
1560	0	0.0	0.0	\$ .00	\$ .00
1775	0	0.0	0.0	\$ .00	\$ .00
1780	0	0.0	0.0	\$ .00	\$ .00
1785	0	0.0	0.0	\$ .00	\$ .00
TOTALS :	33	5:52.3	10.7	\$ 1.74	\$ 57.34



Area Code Summary Report 37

The Area Code Summary Report allows you to see, at a glance, the total number and cost of calls made to each area code. Area codes are listed sequentially. The report includes 700, 800, and 900 calls.

Look at the sample report on page 8.6. The report heading indicates the report period. For each area code, the report lists the NUMBER OF CALLS, TOTAL LENGTH, AVERAGE LENGTH, AVERAGE COST, and TOTAL COST.

The Area Code Summary Report does not prompt a memory management decision.

Section 8/Guest and Administrative Station Reports

The Area Code Summary Report looks like this:

REPORT PERIOD 01/06 TO 01/06

AREA CODE SUMMARY REPORT (32)

PAGE 1

AREA CODE	PLACE	NUMBER OF CALLS	TOTAL LENGTH HR:MN. T	AVERAGE LENGTH HR:MN. T	AVERAGE COST PER CALL	TOTAL COST
203	CT	1	26.1	26.1	\$ 9.09	\$ 9.09
207	ME	2	10.2	5.1	\$ .77	\$ 1.53
413	MA	5	56.8	11.4	\$ 3.30	\$ 16.48
617	MA	19	3:18.4	10.5	\$ 1.33	\$ 25.19
700	700	1	15.9	15.9	\$ .00	\$ .00
800	WAT	1	9.9	9.9	\$ .00	\$ .00
900	900	1	13.7	13.7	\$ 5.05	\$ 5.05
39	Italy	1	10.9	10.9	\$ .00	\$ .00
TOTALS :		31	5:41.9	11.1	\$ 1.85	\$ 57.34

A note about Exception Reports:

The Exception Reports flag special types of calls. These "flags" are referred to as "call identifiers." The call identifiers are:

- CC Credit Card call.
- IV Invalid call.
- OA Operator assisted call.
- \*X OCC call.
- \* Dial-up OCC call.
- IN Direct-dial international call.
- IO Operator assisted international call.
- RM Guest station to guest station call.
- # Call made by another station and billed to station listed on report.

\*\*\*\*\* Field Overflow

---

Under some conditions, there may not be 25 call records in the database to complete one of the Exception Reports. Assume there are 23 call records in the database. All 23 would be included in Exception Report printing. The twenty third call record is followed by this message:

NO MORE CALL RECORDS EXIST FOR THIS REPORT.

25 Most Frequently Called Numbers 41

This report lists the 25 most often called phone numbers. The report lists the numbers dialed in order of decreasing frequency.

The 25 Most Frequently Called Numbers Report is an easy way to identify calling patterns or problem areas. Are certain vendors or directory assistance called excessively. Maybe it's not a single number, but an area of the country that's called often. Check this against an Area Code Summary or Trunk/Line Utilization Report. You might need a WATS line, Other Common Carrier, or secondary equal access carrier.

The 25 Most Frequently Called Numbers Report does not prompt a memory management decision.

Section 8/Guest and Administrative Station Reports

The 25 Most Frequently Called Numbers Report looks like this:

REPORT PERIOD  
07/14 TO 07/20

25 MOST FREQUENTLY CALLED NUMBERS REPORT (41)

PAGE 1

NUMBER DIALED	PLACE	NUMBER OF CALLS	TOTAL LENGTH HR:MN. T	AVERAGE LENGTH HR:MN. T	AVERAGE COST PER CALL	TOTAL COST
312-531-7611	IL	6	3:42.8	37.2	\$ 13.29	\$ 79.76
612-785-0600	MN	4	34.2	8.6	\$ 3.07	\$ 12.26
274-6831	MA	4	2.8	0.7	\$ .84	\$ 3.34
745-2330	MA	4	20.4	5.1	\$ .93	\$ 3.70
498-1000	MA	2	23.4	11.7	\$ 9.22	\$ 18.44
517-285-3478	MI	2	1.0	0.5	\$ .47	\$ .94
203-555-1212	CT	2	10.2	5.1	\$ .60	\$ 1.20
IN 39-41562731	Italy	2	48.4	24.2	\$ 42.70	\$ 85.40
900-410-3434	900	2	3.0	1.5	\$ .85	\$ 1.70
652-7614	MA	2	8.4	4.2	\$ .86	\$ 1.72
813-954-5656	FL	2	6.8	3.4	\$ 1.66	\$ 3.32
818-223-5109	CA	2	12.0	6.0	\$ 2.03	\$ 4.06
305-267-8910	FL	2	23.2	11.6	\$ 8.66	\$ 17.32
904-359-2640	FL	2	0.6	0.3	\$ 2.36	\$ 4.72
212-888-2451	NY	2	23.4	11.7	\$ 4.74	\$ 9.48
1-555-1212	MA	2	7.2	3.6	\$ .35	\$ .70
IN 51-57623178	Peru	2	5.8	2.9	\$ 6.32	\$ 12.64
475-2341	MA	2	48.6	24.3	\$ 17.34	\$ 34.68
489-3858	MA	2	1.6	0.8	\$ .72	\$ 1.44
* 305-232-1644	FL	2	1.0	0.5	\$ 1.39	\$ 2.78
ID 972-5289467	Israel	2	26.0	13.0	\$ 8.50	\$ 17.00
OA 904-356-2400	FL	2	9.2	4.6	\$ 1.00	\$ 2.00
345-4560	MA	2	51.2	25.6	\$ 5.78	\$ 11.56
744-4700	MA	2	9.0	4.5	\$ .87	\$ 1.74
215-336-2222	PA	2	3.2	1.6	\$ 1.74	\$ 3.48
TOTALS :		60	10:03.4	10.1	\$ 5.59	\$ 335.38

25 Longest Calls Report 42

This report lists the 25 longest calls made during a report period. The report lists calls in order of decreasing duration.

The 25 Longest Calls Report is primarily helpful in assessing productivity and identifying abuse. For example, are sales personnel with low productivity spending excessive amounts of time on the phone? Or not enough time? Are individuals, authorized or not, making very long calls? You might have some employees who have to spend a great deal of time on the phone. Are they using the correct services to make their calls?

The 25 Longest Calls Report does not prompt a memory management decision.

Call ID	Duration	Employee	Area	Phone No.
01.01	1:00	...	...	...
02.02	0:55	...	...	...
03.03	0:50	...	...	...
04.04	0:45	...	...	...
05.05	0:40	...	...	...
06.06	0:35	...	...	...
07.07	0:30	...	...	...
08.08	0:25	...	...	...
09.09	0:20	...	...	...
10.10	0:15	...	...	...
11.11	0:10	...	...	...
12.12	0:05	...	...	...
13.13	0:00	...	...	...
14.14	0:00	...	...	...
15.15	0:00	...	...	...
16.16	0:00	...	...	...
17.17	0:00	...	...	...
18.18	0:00	...	...	...
19.19	0:00	...	...	...
20.20	0:00	...	...	...
21.21	0:00	...	...	...
22.22	0:00	...	...	...
23.23	0:00	...	...	...
24.24	0:00	...	...	...
25.25	0:00	...	...	...

Section 8/Guest and Administrative Station Reports

The 25 Longest Calls Report looks like this:

REPORT PERIOD  
01/06 TO 01/06

25 LONGEST CALLS REPORT (42)

PAGE 1

NUMBER DIALED	PLACE	DATE OF CALL	STATION NUMBER	TRUNK USED	TIME OF CALL	LENGTH OF CALL HR:MN. T	COST OF CALL	ACCOUNT CODE
203-589-6643	CT	01/06	1335	0	8:46 PM	26.1	\$ 4.62	
967-8642	MA	01/06	1334	0	10:51 AM	26.0	\$ 4.39	
432-6798	MA	01/06	1334	0	11:13 AM	26.0	\$ 6.31	
413-876-7991	MA	01/06	1332	0	4:01 PM	15.9	\$ 5.99	
700-546-7339	700	01/06	1334	0	5:00 PM	15.9	\$ .00	
532-6990	MA	01/06	1332	0	3:35 PM	13.9	\$ .35	
900-532-6990	900	01/06	1333	0	4:20 PM	13.7	\$ 5.05	
413-876-7991	MA	01/06	1335	0	9:30 PM	13.0	\$ 3.21	
413-538-9941	MA	01/06	1335	0	9:57 PM	13.0	\$ 3.21	
ID 39-12341234	Ita	01/06	1332	0	9:46 PM	10.9	\$ .00	
800-532-6990	WAT	01/06	1333	0	4:45 PM	9.9	\$ .00	
413-648-7741	MA	01/06	100	0	6:10 PM	9.0	\$ 2.13	
532-6995	MA	01/06	1334	0	10:35 AM	8.0	\$ .23	
276-9932	MA	01/06	100	0	6:35 PM	7.8	\$ .85	
432-6778	MA	01/06	1335	0	8:13 PM	7.2	\$ 1.42	
452-8624	MA	01/06	100	0	8:12 PM	6.9	\$ .89	
413-555-1212	MA	01/06	100	0	6:01 PM	5.9	\$ .60	
583-4572	MA	01/06	1335	0	8:20 PM	5.8	\$ .88	
411	MA	01/06	1334	0	5:38 PM	5.1	\$ .00	
* 207-546-7339	ME	01/06	1333	0	4:01 PM	4.5	\$ 1.32	
275-1000	MA	01/06	1332	0	4:36 PM	2.9	\$ .61	
275-1057	MA	01/06	1336	0	2:37 PM	2.4	\$ .61	
IV 12751057339		01/06	1336	0	2:41 PM	2.4	\$ .00	
555-1212	MA	01/06	1334	0	5:42 PM	0.7	\$ .00	

TOTAL COST: \$ 42.67

NO MORE CALL RECORDS EXIST FOR THIS REPORT

25 Most Expensive Calls Report 44

This report lists the 25 most costly calls made during a report period. The report lists calls in order of decreasing cost.

You may want to investigate some of the calls listed on this report. For example, if the most expensive call in the report period was to England, and you normally don't have reason to call Europe, perhaps the call is personal. Does this happen often? Are some of the most expensive calls necessary calls that should have been made over a different trunk?

The 25 Most Expensive Calls Report does not prompt a memory management decision.

Call No.	Cost	Trunk	Destination
001	8.11	TR 1012	001-201-101
002	8.11	TR 1012	001-201-101
003	7.11	TR 1012	001-201-101
004	6.11	TR 1012	001-201-101
005	5.11	TR 1012	001-201-101
006	4.11	TR 1012	001-201-101
007	3.11	TR 1012	001-201-101
008	2.11	TR 1012	001-201-101
009	1.11	TR 1012	001-201-101
010	0.11	TR 1012	001-201-101
011	0.11	TR 1012	001-201-101
012	0.11	TR 1012	001-201-101
013	0.11	TR 1012	001-201-101
014	0.11	TR 1012	001-201-101
015	0.11	TR 1012	001-201-101
016	0.11	TR 1012	001-201-101
017	0.11	TR 1012	001-201-101
018	0.11	TR 1012	001-201-101
019	0.11	TR 1012	001-201-101
020	0.11	TR 1012	001-201-101
021	0.11	TR 1012	001-201-101
022	0.11	TR 1012	001-201-101
023	0.11	TR 1012	001-201-101
024	0.11	TR 1012	001-201-101
025	0.11	TR 1012	001-201-101



Section 8/Guest and Administrative Station Reports

The 25 Most Expensive Calls Report looks like this:

REPORT PERIOD  
01/06 TO 01/06

25 MOST EXPENSIVE CALLS REPORT (44)

PAGE 1

NUMBER DIALED	PLACE	DATE OF CALL	STATION NUMBER	TRUNK USED	TIME OF CALL	LENGTH OF CALL HR:MN.T	COST OF CALL	ACCOUNT CODE
432-6798	MA	01/06	1334	0	11:13 AM	26.0	\$ 6.31	
413-876-7991	MA	01/06	1332	0	4:01 PM	15.9	\$ 5.99	
900-532-6990	900	01/06	1333	0	4:20 PM	13.7	\$ 5.05	
203-589-6643	CT	01/06	1335	0	8:46 PM	26.1	\$ 4.62	
967-8642	MA	01/06	1334	0	10:51 AM	26.0	\$ 4.39	
413-876-7991	MA	01/06	1335	0	9:30 PM	13.0	\$ 3.21	
413-538-9941	MA	01/06	1335	0	9:57 PM	13.0	\$ 3.21	
413-648-7741	MA	01/06	100	0	6:10 PM	9.0	\$ 2.13	
432-6778	MA	01/06	1335	0	8:13 PM	7.2	\$ 1.42	
* 207-546-7339	ME	01/06	1333	0	4:01 PM	4.5	\$ 1.32	
452-8624	MA	01/06	100	0	8:12 PM	6.9	\$ .89	
583-4572	MA	01/06	1335	0	8:20 PM	5.8	\$ .88	
276-9952	MA	01/06	100	0	6:35 PM	7.8	\$ .85	
275-1000	MA	01/06	1332	0	4:36 PM	2.9	\$ .61	
275-1057	MA	01/06	1336	0	2:37 PM	2.4	\$ .61	
413-555-1212	MA	01/06	100	0	6:01 PM	5.9	\$ .60	
532-6990	MA	01/06	1332	0	3:35 PM	13.9	\$ .35	
532-6995	MA	01/06	1334	0	10:35 AM	8.0	\$ .23	

TOTAL COST: \$ 42.67

NO MORE CALL RECORDS EXIST FOR THIS REPORT

Section 8/Guest and Administrative Station Reports

Administrative Activity Dump

The Administrative Activity Dump transmits a list of all administrative call records currently in memory to your printer. The call records are transmitted chronologically in the following format:

Station# XXX  
SEQ# MM/DD ID 123-456-7890 PLACE# HR:MN XX HR:MN.T \$XXX.XX  
Station# XXX Total = \$XXX.XX

Station # XXXXX Administrative station from which call was placed.

SEQ# (4) Call Sequence number

MM/DD (5) Date of Call

ID (2) Call Identifier

123-456-7890 (12) Number Dialed

PLACE# Place called (state or country)

HR:MN XX (8) Start time of call

HR:MN.T (7) Duration of call

\$XXX.XX (7) Cost of call

Station # XXXXX Total Stations's cost of calls

A sample is on the next page.

Section 8/Guest and Administrative Station Reports

Here's a sample of the Administrative Activity Dump Report:

PAGE 1

STATION #	285						
003A	07/14	303-823-9000	CO	10:14 AM	13.2	\$	12.50
007A	07/14	201-755-4343	NJ	5:02 PM	4.5	\$	.99
010A	07/15	IN 671-2316352	Guam	9:01 AM	1.6	\$	3.20
012A	07/15	413-834-5782	MA	10:10 AM	9.8	\$	3.89
017A	07/16	345-4560	MA	9:03 AM	25.6	\$	5.78
021A	07/16	274-6831	MA	2:14 PM	0.4	\$	1.53
027A	07/17	312-531-7611	IL	10:09 AM	1:40.8	\$	33.47
028A	07/17	312-531-7611	IL	11:51 AM	7.6	\$	2.78
029A	07/17	312-531-7611	IL	1:01 PM	3.0	\$	3.63
035A	07/19	305-267-8910	FL	11:23 AM	11.6	\$	8.66
039A	07/19	274-6831	MA	4:32 PM	1.0	\$	.14
044A	07/20	517-285-3478	MI	1:14 PM	0.5	\$	.47
046A	07/20	612-785-0600	MN	5:08 PM	8.9	\$	1.93
050A	07/14	303-823-9000	CO	10:14 AM	13.2	\$	12.50
054A	07/14	201-755-4343	NJ	5:02 PM	4.5	\$	.99
057A	07/15	IN 671-2316352	Guam	9:01 AM	1.6	\$	3.20
059A	07/15	413-834-5782	MA	10:10 AM	9.8	\$	3.89
064A	07/16	345-4560	MA	9:03 AM	25.6	\$	5.78
068A	07/16	274-6831	MA	2:14 PM	0.4	\$	1.53
074A	07/17	312-531-7611	IL	10:09 AM	1:40.8	\$	33.47
075A	07/17	312-531-7611	IL	11:51 AM	7.6	\$	2.78
076A	07/17	312-531-7611	IL	1:01 PM	3.0	\$	3.63
082A	07/19	305-267-8910	FL	11:23 AM	11.6	\$	8.66
086A	07/19	274-6831	MA	4:32 PM	1.0	\$	.14
091A	07/20	517-285-3478	MI	1:14 PM	0.5	\$	.47
093A	07/20	612-785-0600	MN	5:08 PM	8.9	\$	1.93
STATION #	285	TOTAL =			\$157.94		

More often than not, when you enable the Administrative Activity Dump, you will be transmitting to another computer instead of to your printer. Connect your computer to the PL's serial port. Program the Printer Parameters Database (62) to enable transmission between the PL and your computer. Programming the Printer Parameters Database (62) to accommodate the parameters of your computer will enable the PL and your computer to communicate.

## Section 8/Guest Administrative Station Reports

The Administrative Activity Dump can transmit data at speeds of 300 to 19,200 baud, 7 or 8 data bits; with odd, even or no parity. For details on programming the Printer Parameters Database, see pages 11.4 - 11.6.

To enable the administrative Activity Dump, follow this procedure:

1. Connect your computer to the PL serial port (if you are transmitting to a computer instead of your parallel printer.)
2. Make any programming changes to the Printer Parameters Database.
3. Press SELECT.
4. Enter the selection code 57.
5. Press ENTER.

To cancel the Administrative Activity Dump at any time:

1. Press CANCEL.
2. Press CONFIRM.

The Administrative Activity Dump prompts an activity management decision. This affects activity data for administrative stations in that it only erases the call records in the Station Activity Report (20) and this report.

Section 8/Guest and Administrative Station Reports

Guest Activity Dump 58

The Guest Activity Dump transmits a list of all guest call records currently in memory to your printer. The call records are transmitted chronologically in the following format:

```

Station# XXXXX
SEQ# MM/DD ID 123-456-7890 PLACE# HR:MN:T $XXX.XX
Station# XXX Total = $XXX.XX

Station # XXXXX Guest station from which
call was made
SEQ# (4) Call Sequence #
MM/DD (5) Date of call
ID (2) Call Identifier
123-456-7890 (12) Number dialed
PLACE# (6) Place called
HR:MN XX (8) Start time
HR:MN.T (7) Duration
$XXX.XX (7) Cost of call
Station # XXXXX Total Station's total cost of
calls
    
```

A sample is on the next page.

More often than not when you enable the Guest Activity Dump you will be transmitting to another computer instead of your printer. Connect your printer to the PC serial port. To enable the printer hardware device, go to enable the printer hardware device on your computer. Programming the printer hardware device (LPT) to accommodate the parameters of your computer will enable the PC and your computer to communicate.

The Guest Activity Dump can transmit data at speeds of 300 to 115,200 baud. To set the baud rate, go to

Section 8/Guest and Administrative Station Reports

Here's a sample of the Guest Activity Dump Report:

PAGE 1

STATION #	275						
001A	07/14	212-546-9670	NY	8:30 AM	1.8	\$	3.64
005A	07/14	411	MA	12:38 PM	0.6	\$	2.15
013A	07/15	703-981-7350	VA	11:30 AM	6.1	\$	3.45
015A	07/15	744-4700	MA	3:25 PM	4.5	\$	.87
018A	07/16	OR 904-356-2400	FL	11:20 AM	4.6	\$	1.00
025A	07/17	475-2341	MA	8:25 AM	24.3	\$	17.34
033A	07/19	904-359-2640	FL	9:00 AM	0.3	\$	2.36
034A	07/19	745-2330	MA	10:45 AM	3.6	\$	.87
036A	07/19	818-223-5109	CA	12:35 PM	6.0	\$	2.03
038A	07/19	652-7614	MA	3:39 PM	4.2	\$	.86
042A	07/20	IN 39-41562731	Italy	9:08 AM	24.2	\$	42.70
045A	07/20	498-1000	MA	2:38 PM	11.7	\$	9.22
048A	07/14	212-546-9670	NY	8:30 AM	1.8	\$	3.64
052A	07/14	411	MA	12:38 PM	0.6	\$	2.15
060A	07/15	703-981-7350	VA	11:30 AM	6.1	\$	3.45
062A	07/15	744-4700	MA	3:25 PM	4.5	\$	.87
065A	07/16	OR 904-356-2400	FL	11:20 AM	4.6	\$	1.00
072A	07/17	475-2341	MA	8:25 AM	24.3	\$	17.34
080A	07/19	904-359-2640	FL	9:00 AM	0.3	\$	2.36
081A	07/19	745-2330	MA	10:45 AM	3.6	\$	.87
083A	07/19	818-223-5109	CA	12:35 PM	6.0	\$	2.03
085A	07/19	652-7614	MA	3:39 PM	4.2	\$	.86
089A	07/20	IN 39-41562731	Italy	9:08 AM	24.2	\$	42.70
092A	07/20	498-1000	MA	2:38 PM	11.7	\$	9.22
STATION #	275	TOTAL =			\$172.98		

More often than not, when you enable the Guest Activity Dump, you will be transmitting to another computer instead of your printer. Connect your computer to the PL serial port. Program the Printer Parameters Database (62) to enable transmission between the PL and your computer. Programming the Printer Parameters Database (62) to accommodate the parameters of your computer will enable the PL and your computer to communicate.

The Guest Activity Dump can transmit data at speeds of 300 to 19,200 baud; 7 or 8 bits; with odd or

## Section 8/Guest and Administrative Station Reports

Printer Parameters Database (62), see pages 11.4 - 11.6. To enable the Guest Activity Dump, follow this procedure:

1. Connect your computer to the PL serial port (if you are transmitting to a computer instead of your printer.
2. Make any programming changes to the Printer Parameters Database (62).
3. Press SELECT.
4. Enter selection code 57.
5. Press ENTER.

To cancel the Guest Activity Dump at any time:

1. Press CANCEL.
2. Press CONFIRM.

The Guest Activity Dump prompts an activity management decision. This affects activity data for guest stations in that it only erases the call records in the Guest Check-Out Report (50), Night Audit Activity Report (52) and this report. All other reports will continue to show these records.

Summary data for the guest station calls and activity and summary data for administrative calls remain in the PL's memory. Depending on your purposes, you will want to save or take steps to erase administrative station activity and all (guest and administrative station) summary data now.

Clear the remaining (administrative station) activity data using selection code 94. Clear all (administrative and guest station) summary data using selection code 95. See pages 12.6 - 12.7 for procedures on clearing memory using these selection codes. The Administrative Activity Dump (57) prompts you for an activity management decision which affects administrative stations only. See page 8.14 for details.





*Section 9/Database Directory Descriptions*

---



Section 9/Database Directory Descriptions

Introduction.....9.1  
Station Database Directory.....9.2  
Trunk & Equal Access Database Directory...9.5  
Miscellaneous Database Directory.....9.10



Database Directories help you manage your PL. You will be programming a number of databases. The Database Directories keep track of the last-programmed value for every PL database as well as an updated guest/administrative breakdown, and trunk information. These are updated automatically each time you change a database value.

Once you program the PL, print each of the Database Directories. This way, you have an accurate record of your system's parameters. These are useful as references when you want to reprogram and as diagnostic tools.

The Database Directories are:

- Station Database Directory 46
- Trunk Database Directory 47
- Miscellaneous Database Directory 48

Following each description, you will find a sample directory. Notice that for each directory, the selection code follows the directory name for easy reference.

Station Database Directory 46

The Station Database Directory displays your organizational chart in tabular form. It shows you quickly which stations you've designated as guest stations, which as administrative stations. The directory also indicates third party billing and credit limits for guest stations.

The Station Database Directory is populated in one of two ways:

- when you program the Station Database.
- via the datastream as transmitted by your telephone system.

When you program the Station Database, you designate each station as guest or administrative. You also assign each administrative station to a department. Departments are numbered 1 through 9.

Print a Station Database Directory -- selection code 46 -- as soon as you program the Station Database. This accurate record of programmed values will serve as a reference and help you reprogram.

The "station number" field of the Directory is populated by the datastream even if you don't program the Station Database. Your telephone system transmits a call record, in the form of a datastream, to the PL. The datastream includes the station number from (or to) which the call was made. The first call from or to a station updates the Station Database Directory with the station number.

## Section 9/Database Directory Descriptions

Guest/administrative station, third party billing and credit limit information is not assigned when the Station Database Directory is populated in this manner. The report will show 0 in the GUEST/ADMIN, BILLING STATION, and CREDIT LIMIT columns.

The Station Database Directory includes the following information:

Directory Item	Notes
Station Number	That you have programmed, or according to the datastream.
Guest/Admin	Stations are designated as "GUEST" or "ADMIN".
Billing Station	Guest station that will be billed for calls attributable to that station.
Credit Limit	Credit limit for the station's calls.

Section 9/Database Directory Descriptions

The Station Database Directory looks like this:

STATION DATABASE DIRECTORY (46)

PAGE 1

STATION NUMBER	GUEST/ ADMIN	BILLING STATION	CREDIT LIMIT
100	ADMIN 1		
101	ADMIN 1		
102	ADMIN 1		
103	ADMIN 1		
104	ADMIN 1		
105	ADMIN 1		
106	ADMIN 1		
107	ADMIN 1		
108	ADMIN 1		
109	ADMIN 1		
110	ADMIN 1		
1330	GUEST	1336	
1331	GUEST	1336	
1332	GUEST	1336	
1333	GUEST	1336	
1334	GUEST	1336	
1335	GUEST	1336	
1336	GUEST		



Trunk and Equal Access Database Directory 47

The Trunk and Equal Access Database Directory lists the call rating formulas for each trunk and equal access carrier. Print this Directory for an at-a-glance listing of the percent of standard tariff, cost per minute, and cost per call that you have assigned to each trunk and equal access carrier.

The Trunk and Equal Access Directory is populated in one of two ways:

- when you program the corresponding databases with call rating information.
- via the datastream as transmitted by your telephone system.

You assign a call rating formula (percent of standard tariff and any additional costs) to each trunk when you program the Trunk Database. The information you program into the trunk Database is listed in the first half of the Trunk and Equal Access Database Directory.

You assign a call rating formula to each (percent of standard tariff and any additional costs) to each equal access carrier when you program the Equal Access Database. The information you program into the Equal Access Database is listed in the latter half of the Trunk and Equal Access Database Directory.

Refer now to the example of an Equal Access Database Directory on page 9.9. The first column is labelled "Access Code Identifier." The access code identifier simply helps you keep track of you secondary carriers.

Your primary carrier, designated "1," does not have an access code identifier. The nine secondary carriers you can program do. Let's say you have two secondary carriers, AT&T and GTE Sprint. If you program your secondary carrier AT&T first, the PL assigns it access code identifier 1. This

## Section 9/Database Directory Descriptions

appears on reports and in this directory as "\*1." because you program GTE Sprint after AT&T, the access code identifier appears as "\*2." If you were to add a third primary carrier later, the PL would assign it access code identifier 3.

Print the Trunk and Equal Access Database Directory -- selection code 47 -- as soon as you finish programming the corresponding databases. This accurate record of programming values will serve as a reference and help you reprogram.

The trunk number, trunk type, access code identifier, and access code fields of the directory are populated by the datastream. Your telephone system transmits call records, in the form of a datastream, to the PL. The datastream includes trunk and access code information. The first call over each trunk and via each long distance carrier updates the Trunk and Equal Access Database Directory with trunk and access code information.

The percent of standard tariff will be 100% and additional costs \$00.00 if the Directory is populated in this manner. This is not important if you don't want to add surcharges, don't have special services like WATS, and have only one long distance service.

Each trunk number can be up to six digits long. Some telephone systems differentiate between trunk numbers, groups, highways, etc. The PL takes the first six digits of trunk information (be it number, group, or highway) as the trunk number. This is the trunk number that shows up in the Trunk and Equal Access Database Directory.

To discover how the PL handles trunk numbers for your telephone system you will have to make some comparisons. Follow the procedure outlined below:

1. Program the Echo All Calls Database -- selection code 72 -- to print a standard echo. To do this, choose option 1 in stage 1 of the Echo All Calls Database. You do not have to program stage 2 for this application. See page 11.39 for complete instructions.

## Section 9/Database Directory Descriptions

2. Make some long distance phone calls using each of your trunks and special services. As you make each call it will print because the standard echo is enabled. The calls are also stored in memory. Later, you will have to erase these calls. See page 12.6 for instructions on erasing these test calls.

3. Print a Trunk Database Directory -- selection code 47.

4. Compare the trunk information listed in the Trunk and Equal Access Database Directory with the trunk information in the printed list of echoed calls.

---

Comparing these report printouts will show you how the PL interprets the trunk information that is transmitted by your telephone system.

Use the trunk information from the Trunk and Equal Access Database Directory when you program the Trunk Database -- selection code 65. See page 10.9 for Trunk Database information.

## Section 9/Database Directory Descriptions

The Trunk Database Directory includes the following information:

Directory Item	Notes
Trunk Number	As designated by your telephone system.
Trunk Type	Indicates the type of trunk: standard, standard with surcharges, tie line, foreign exchange, WATS, OCC. The default value is 0.
Percent of Standard Tariff	Indicates the costing method applied. The default is 100% of standard rates.
Cost/Call	The optional flat rate added to each call made over the trunk.
Cost/Minute	The optional fixed cost added to each minute of call activity made over the trunk.

Section 9/Database Directory Descriptions

The Trunk Database Directory looks like this:

TRUNK DATABASE DIRECTORY (47)

PAGE 1

TRUNK NUMBER	TRUNK TYPE	PERCENT OF DDD	COST PER MINUTE	COST PER CALL
0	0	100 %	\$ .00	\$ .00
1230	0	100 %	\$ .00	\$ .00
1240	0	100 %	\$ .00	\$ .00
1560	1	100 %	\$ .10	\$ .00
1775	4	0 %	\$ .20	\$ .00
1780	4	0 %	\$ .20	\$ .00
1785	4	0 %	\$ .20	\$ .00

The Equal Access Database Directory looks like this:

EQUAL ACCESS DATABASE DIRECTORY (47)

ACCESS CODE IDENTIFIER	ACCESS CODE	PERCENT OF DDD	COST PER MINUTE	COST PER CALL
	1	100 %	\$ .00	\$ .00
*1	10000	80 %	\$ .00	\$ .00

---

 Miscellaneous Database Directory 48

The Miscellaneous Database Directory lists the values you program into the remaining databases. These values and parameters are variable and depend on the type of phone system and printer you have as well as the kind of information you want to be included in your reports.

This database is an extremely helpful reference tool. Print the Miscellaneous Database Directory at installation, as soon as you have programmed the SMDR Parameters, Printer Parameters, Set Date, and Set Time Databases.

Print the Miscellaneous Database Directory again, after you finish programming the remaining databases, and each time you reprogram. This accurate record of programmed values will serve as a reference and help you reprogram. This will only take a few minutes with an up-to-date Miscellaneous Database Directory.

The Miscellaneous Database Directory includes this information:

Directory Item	Notes
Date	Date you program in the Set Date Database.
Time	Time you program in the Set Time Database.
SMDR Values	Baud rate, number of data bits, and parity you program in the SMDR Parameters Database.
Printer Values	Type of printer and pagination you program in the Printer Parameters Database.
System Capacities	Number of stations and trunks.

## Section 9/Database Directory Descriptions

Directory Item	Notes
Dial-Up OCC Values	Percent of standard rate, additional cost/minute and cost/call, and number of trailing digits to ignore.
Valid Call Values	Valid Call Timing Threshold and Set-up Time for domestic and international calls.
Local Call Values	Accept or reject local calls and type of service you program in the Local Call Parameters Database.
Incoming Calls	Accept or reject incoming calls.
Echo Values	Echo on or off, type of echo, and echo rejected calls you program in the Echo All Calls Database.
Memory Full Values	Percent of capacity at which reports print and selection codes of reports to print automatically you program in the Memory Full Database.
Auto Print Values	Indicator, cycle, parameters, selection codes, and time you program in the Auto Print Database.

DATABASE ITEM	PROGRAMMED VALUE			
Date	03/24/87			
Time	10:22 AM			
Printer: Parallel or Serial	Parallel			
End of Line Character (CR, CR/LF, FF)	CR/LF			
Pagination (Suppressed, Enabled)	Enabled			
Page Length (in lines)	66			
SMDR: Baud Rate	300			
Number of Data Bits	8			
Parity (None, Odd, Even)	None			
Station Capacity	60			
Trunk Capacity	40			
Programmed Account Code Capacity	0			
Programmed Account Code Size	0			
Programmed Account Code Marker	0			
Admin Dial-up OCC Call Rating:				
Percent of Primary Carrier Rate	80			
Cost per Minute (in pennies)	0			
Cost per Call (in pennies)	0			
Number of Trailing Digits to Ignore	0 Digits			
Valid Call Timing Threshold (Domestic)	42 Seconds			
Set-up Time (Domestic)	30 Seconds			
Valid Call Timing Threshold (International)	42 Seconds			
Set-up Time (International)	30 Seconds			
Local Calls: Accept or Reject	Accept			
Measured or Unlimited Service	Measured			
Incoming Calls: Accept or Reject	Reject			
Echo All Calls (No, Standard, Filtered, Hexadecimal)	No			
Echo Rejected Calls (No, Yes)	No			
Memory Full: Print at 85% Capacity				
Reports 20 30 32 51 52				
Auto Print:				
Indicator	Cycle	Parameter	Reports	Time



DATABASE ITEM				PROGRAMMED VALUE
-----				-----
1	Daily	-	51 52 53	11:59 PM
2	Not Requested	-		
3	Not Requested	-		
4	Not Requested	-		
5	Not Requested	-		
Guest Local Call Surcharge				0.75
Guest Intrastate Toll Fixed Cost Surcharge				0.50
Guest Intrastate Toll Percent Surcharge				0
Guest Interstate Toll Fixed Cost Surcharge				1.00
Guest Interstate Toll Percent Surcharge				0
Guest International Fixed Cost Surcharge				1.50
Guest International Percent Surcharge				0
Guest Maximum Surcharge Limit				N/A
Admin Local Call Surcharge				0.00
Admin Intrastate Toll Fixed Cost Surcharge				0.00
Admin Intrastate Toll Percent Surcharge				0
Admin Interstate Toll Fixed Cost Surcharge				0.00
Admin Interstate Toll Percent Surcharge				0
Admin International Fixed Cost Surcharge				0.00
Admin International Percent Surcharge				0
Admin Maximum Surcharge Limit				N/A
Operator Assisted Calls Fixed Cost Surcharge				1.00
Credit Card Calls Fixed Cost Surcharge				1.00
950 Calls Fixed Cost Surcharge				0.00
900 Calls Fixed Cost Surcharge				0.00
800 Calls Fixed Cost Surcharge				0.00
700 Calls Fixed Cost Surcharge				0.00
411 Calls Fixed Cost Surcharge				0.50
555-1212 Calls Fixed Cost Surcharge				0.00
NPA-555-1212 Calls Fixed Cost Surcharge				0.00
Provincial Tax Factor				.1200
Local Call (Not Taxed, Taxed)				Not Taxed
Long Distance (Not Taxed, Taxed)				Taxed
International (Not Taxed, Taxed)				Taxed
PMS Record Transmission (None, Guest, Admin, Both)				None
Port (None, Serial, Optional)				None
Format (Type I, II, III)				I

----- DATABASE ITEM -----	----- PROGRAMMED VALUE -----		
Protocol (None, Type I, II, III)	None		
End of Line Characters	CR/LF		
Start of Line Characters	None		
Pointer (Beginning, PMS, Printer)	Beginning		
Baud Rate	1200		
Number of data bits	8		
Parity (None, Odd, Even)	None		
PMS Transmit Delay Following ACK	0		
PMS Transmit Delay Following NAK	0		
HOBIC Merge Transmission Parameters:			
Port (None, Serial, Optional)	None		
Interface Type	RS232		
Timing	Asynchronous		
Baud Rate	300		
Data Bits	8		
Parity (None, Odd, Even)	None		
HOBIC Merge Data Format			
First Field:	Date		
Second Field:	Station		
Third Field:	Phone Number		
Fourth Field:	Time of Day		
Fifth Field:	Duration		
Sixth Field:	Cost		
Seventh Field:	Ignore		
Eighth Field:	Ignore		
Ninth Field:	Ignore		
Wake-up Messages (Print, Ignore)	Ignore		
Buffer Size	0		
Call Record Statistics (Last 24 Hours):			
00:00 = 0	01:00 = 0	02:00 = 0	03:00 = 0
04:00 = 0	05:00 = 0	06:00 = 0	07:00 = 0
08:00 = 0	09:00 = 0	10:00 = 0	11:00 = 0
12:00 = 0	13:00 = 0	14:00 = 0	15:00 = 0
16:00 = 0	17:00 = 0	18:00 = 0	19:00 = 0
20:00 = 0	21:00 = 0	22:00 = 0	23:00 = 0

*Section 10/Programming the Databases*

---



Section 10/Database Programming

Introduction.....	10.1
Programming Defaults.....	10.2
Wrap-Around Databases.....	10.2
To Program a Database.....	10.3
To Program a Wrap-Around Database.....	10.5
Additional Programming Features.....	10.6



---

Introduction

Once you decide exactly what you want to use your PL for, it's time to do some programming. Some databases should be programmed at installation. These are system-related databases; they contain the specifications for your telephone system and organization.

The remaining databases determine what each report will look like and what type of data it will contain. For example, you can program the PL to accept or reject incoming calls or program the PL to print reports automatically. See Section 11/Database Descriptions for a list of all programming options.

---

Database Directories help you manage your PL. The Database Directories keep track of the last-programmed value for every PL database as well as an updated organizational chart and trunk information. These are updated automatically each time you change a database value.

Once you program the PL, print each of the Database Directories. This way, you have an accurate record of your system's parameters. These are useful as references when you want to reprogram and as diagnostic tools. See Section 9/Database Directory Descriptions for a discussion and sample of each directory.





---

### Programming Defaults

Each database is divided into sections. These sections are called stages. Each stage requires you to define a specific parameter.

The PL prompts you to program. The stage window on the front panel displays the number of the stage you should program. Once you program a stage, the PL prompts you to enter data for the next stage, or if you've finished, returns to the idle state.

The first time you program a database, notice that a preprogrammed value appears in the data window for each stage. This is a pre-programmed default value.

To retain the default value, press ENTER. To program a different value, follow the normal procedure: enter a value for the stage, then press ENTER to advance to the next stage.

The second and any subsequent time you access a database, the most recently programmed value for each stage appears in the data window. Retain that value by pressing ENTER or, enter a new value and then press ENTER to advance to the next stage.

---

### Wrap-Around Databases

When you program the station and trunk databases, you may have a lot of work to do -- you could be programming many stations at a time. Instead of selecting the Station Database time after time, you only have to do so once. This is because the station database is a wrap-around database.

When you are programming a wrap-around database, the system prompts you to enter another station or trunk once you program the last stage.


To exit any wrap-around database, press SELECT.

To program a database


You...


The PL...

1 Press .

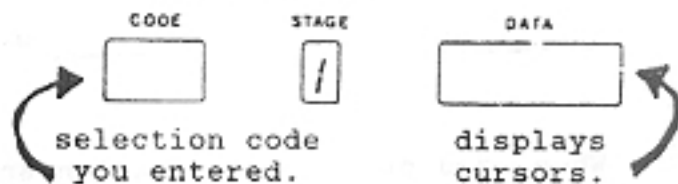
2  displays cursors.

3 Enter the selection code.


If you've made a mistake...  
 Press .  
 Re-enter the selection code.


4 Press  if you've entered the correct code.

5 The front panel windows look like this:



6 Enter data for stage 1.

If you've made a mistake...  
Press  .  
Re-enter the data.

7 Press  if you've entered  
the data correctly.

8 For single stage data-  
bases, the PL returns  
to the idle state.

Otherwise, the database  
advances to stage 2.

9 Repeat steps 6 through 8.

To program a wrap-around database

You...

The PL...

1 Press  .

2 Enter the selection code.

3 The PL prompts you to begin programming the station or trunk.

The front panel windows look like this:



4 Program the entire database.

5 The front panel windows look like this:



The PL is prompting you to program the next station or trunk.

6 Program the entire database for the next station or trunk.

Repeat the process until you finish programming.

7 Press  to exit the database.

### Additional Programming Features \* and #

The \* and # keys on the PL front panel allow you to program large numbers of stations and trunks in just a few short steps. You can easily program a range of consecutively numbered stations or trunks with the \* key. The # key makes programming groups of non-consecutive stations or trunks a simple process.

The \* signals the PL that you will be programming a range of stations or trunks with identical parameters. For example, pressing the \* key while programming trunk numbers 1050 to 1080 automatically assigns the values you program for trunk number 1050 to all the trunks in the range. The # key can be used to assign values to groups of non-consecutively numbered stations.

The features are best illustrated by example. Programming procedures for you to follow as you work begin below.

#### Example 1

Let's program the Trunk Database using the \* key. To program trunk numbers 1050 to 1080 as non-standard trunks with an additional cost per call of thirty cents, follow these steps.

Stage 1: Enter trunk number 1050.  
Press \*  
Enter trunk number 1080.  
Press ENTER.

This establishes the range of trunks to which the values you program in stages 2 through 5 will be applied.

Stage 2: Enter the programming code 1.  
Press ENTER.

This identifies trunk numbers 1050 to 1080 as non-standard trunks.

Stage 3: Press ENTER.

This retains the default -- 100% of standard tariff for trunk numbers 1050 to 1080. Enter the value 100 and press ENTER if a different default appears in the data window.

Stage 4: Press ENTER.

This retains the default value of \$0.00 additional cost per minute for trunk numbers 1050 to 1080. Enter the value 0 and press ENTER if a different default value appears in the data window.

Stage 5: Enter the value 30.  
Press ENTER.

This assigns an additional cost per call of \$0.30 to trunk numbers 1050 to 1080.

You've just programmed thirty trunks in almost the same amount of time it takes to program one!

#### Example 2

Let's program the Station Database using the \* key. A national sales meeting is being held at your hotel. Calls from 100 rooms are to be billed to a single room. Follow these steps:

Stage 1: Enter room number 225.  
Press \*  
Enter room number 325.

This establishes the range of stations to which the values you program in stages 2 through 4 will be applied.

Stage 2: Press ENTER.

This retains the default value, labelling stations 225 through 325 as guest stations. Enter the value 0 and press ENTER if a 1 appears in the data window.

Stage 3: Enter room number 230.  
Press ENTER.

This assigns third party billing to room number 230. Charges from room numbers 225 to 325 will be billed to a single room -- number 230. You cannot designate the first room number in the range as the room to which you want all calls billed.

If you entered the room number 225 in stage 3, each room in the range would be billed individually.

Stage 4: Press ENTER.

This assigns an unlimited credit to each of the rooms in the range. Enter the value 0 and press ENTER if a different value appears in the data window.

You've just programmed one hundred guest stations in almost the same amount of time it takes to program one!

### Example 3

Let's program the Trunk Database using the # key. In this example, we'll program 10 trunks as WATS lines with a cost per minute of forty-five cents. To begin, program all five stages of the Trunk Database for the first of your ten trunks, number 2020.

Stage 1: Enter the trunk number 2020.  
Press ENTER.

Stage 2: Enter 4 (WATS line).  
Press ENTER.

Stage 3: Enter 0 (0% of the standard tariff).  
Press ENTER.

Stage 4: Enter 45 (\$0.45/minute).  
Press ENTER.

Stage 5: Press ENTER (or enter 0 and press ENTER).

You have programmed the first trunk in your group of ten. The database returns to stage 1 (remember, this is a wrap-around database.) Now enter the next trunk number in your group -- 3030.

Stage 1: Enter the trunk number 3030.  
Press ENTER.

Stage 2: Press #

This signals the PL that the trunk number 3030 has the same costing parameters (a WATS line with a charge of \$0.45/minute) as trunk number 2020. You don't have to program stages 2 through 5! Pressing the # key takes care of that.

The database returns to stage 1. Enter the next trunk number in your group -- 4040.

Stage 1: Enter the trunk number 4040.  
Press ENTER.

Stage 2: Press #

This signals the PL that trunk number 4040 has the same costing parameters (a WATS line with a charge of \$0.45/minute) as trunk number 2020. Continue programming in this manner until all the trunks in your group have been programmed. Follow the same pattern for Station Database programming.

**IMPORTANT!** Programming groups of non-consecutive stations and trunks only works as described above if system defaults are in place. Once you have programmed a station or trunk with values other than those listed as system defaults, the values you program become the new default values. Once new default values are in place, the # key will signal the PL to pick up the current default values instead of the values you program for the first station or trunk in your group.

To be sure of the current default values for stations and trunks, print a Station Database Directory (46) or a Trunk and Equal Access Database Directory (47). These reports will tell you what values are in place for the station and trunks in your system. It may be easier, if many of the stations or trunks in your group have already been programmed and new defaults are in place, to reprogram stations or trunks singly.



Section 11/Database Descriptions



## Section 11/Database Descriptions

Introduction.....	11.1
Set Date Database.....	11.2
Set Time Database.....	11.3
Printer Parameters Database.....	11.4
SMDR Parameters Database.....	11.7
Trunk Database.....	11.9
Equal Access Database.....	11.15
Dial-Up OCC Database.....	11.22
Station Database.....	11.25
Valid Call Timing Database.....	11.28
Local Call Parameters Database.....	11.35
Incoming Call Parameters Database.....	11.37
Echo All Calls Database.....	11.39
Memory Full Database.....	11.41
Auto Print Database.....	11.45
Surcharge Databases.....	11.49
Lodging Surcharges Database.....	11.51
Operator Assisted Surcharges Database....	11.53
Directory Assistance Surcharges.....	11.55
Taxes Database.....	11.56
HOBIC Merge Transmission Database.....	11.60
HOBIC Merge Data Format Database.....	11.62
Wake-Up Messages Database.....	11.64



This section describes each of the PL's databases in detail. The databases are listed in numerical order by selection code. Each description explains the purpose of that database and gives examples where helpful. This is followed by a programming table that lists, at a glance, the programming stages, options, and default values.

## Section 11/Database Descriptions

---

### Set Date Database 60

Program the Set Date Database at installation. The PL uses the date you program

- when the datastream does not contain date information.
- for Auto Print printing. See page 10.45.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

### Set Date Database 60

Stage	Description	Range	Default
1	Month	01-12	1
2	Day	01-31	1
3	Year	1980-3000	1986

## Section 11/Database Descriptions

### Set Time Database 61

Program the Set Time Database at installation. The PL uses the time you program

- when the datastream does not contain time information.
- for Auto Print printing. See page 10.45.

As soon as you apply AC power, the PL's clock starts "ticking." The clock starts timing from 12:00 AM. The first time you program this database, the stage 1 default will reflect the amount of time that has elapsed since you applied power.

There is only one stage in the Set Time Database. Use military time -- a twenty-four hour clock -- when you are programming. 1200 is noon, 0000 is midnight.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

### Set Time Database 61

Stage	Description	Range	Default
1	Time of Day	0000-2359	Varies
Notes: 1200 is noon, 12:00 PM 0000 is midnight, 12:00 AM			

The PL has three I/O ports: serial, SMDR, and parallel. Program this database to identify active ports and make sure the PL is compatible with your printer.

Stage 1 identifies the port for which you are programming parameters. Choose option 1 if you are going to connect the PL to a parallel printer. Choose option 2 if you are going to connect the PL to a serial printer. Option 3 does not apply to the lodging package.

You only have to program stages 1 through 4 if you are programming for a parallel printer (parallel port, option 1). If you enter a 1 in stage 1, the PL prompts you to enter data in stages 2 through 4, then returns to the idle state.

Stages 5, 6, and 7 only apply to serial printers. If you enter a 2 in stage 1, the PL prompts you to program the entire database.

Stages 2, 3, and 4 define pagination. Your printer may return a carriage return or carriage return/line feed at the end of each line. Program stage 2 to adjust your printer's options.

When pagination is enabled -- the default -- the PL ends each page after the value you program into stage 4.

When pagination is suppressed, the PL skips four lines after the last line of text. This saves paper. The PL will not print any page longer than the value you program into stage 4 if pagination is suppressed.



## Section 11/Database Description

Stages 5, 6, and 7 only apply to serial printers. These stages define the serial baud rate, number of data bits, and parity. Program these stages according to your printer's specifications. The PL is able to send data to your program only after you program these stages.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Note: A flashing "P" in the stage window indicates that the PL is having problems communicating with the printer.

Section 11/Database Descriptions

Printer Parameters Database 62

Stage	Description	Range	Default
1	Port Assignment  Notes: 1 Parallel port 2 Serial port 3 Optional serial port	1-3	1
2	Newline Character  Notes: 1 CR 2 CR/LF 3 FF	1-3	2
3	Pagination  Notes: 0 Suppressed 1 Enabled	0-1	1
4	Page Length	10-65	66
5	Serial Port Baud Rate  Notes: 300, 600, 1200, 2400, 4800, 9600, 19.2K	300-19200	300
6	Data Bits	7-8	8
7	Parity  Notes: 0 None 1 Odd 2 Even	0-2	0

## Section 11/Database Descriptions

---

### SMDR Parameters Database 63

Your telephone system cannot transmit data to the PL unless the telephone system's SMDR parameters match those of the PL. There are three SMDR parameters:

- Baud rate
- Number of data bits
- Parity

Check to see what your telephone system's parameters are and program this database to match. The documentation that came with your telephone system will have a list of parameters.

There may be an occasion for you to reprogram this database. To see a list of the values you have currently programmed into the SMDR Parameters Database, print the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

SMDR Parameters Database 63

Stage	Description	Range	Default
1	SMDR Baud Rate Notes: 300, 600, 1200, 2400, 4800, 9600, 19.2K	300-19200	300
2	Data Bits	7-8	8
3	Parity Notes: 0 None 1 Odd 2 Even	0-2	0

Your software module is pre-programmed with local, long distance, and direct dial international rates. Discount rates for off-peak hours, weekends, and holidays are included. These values are referred to as the "standard tariff." If these rates are sufficient for your call accounting purposes, you do not have to program the Trunk Database. All calls will be automatically costed according to the standard tariff (pre-programmed telephone company rates).

If you have any special lines --WATS, tie, foreign exchange -- you will have to program the Trunk Database.

Every call you make is routed over a telephone trunk. The standard tariff (preprogrammed telephone company rate) applies to calls made over standard trunks. Local calls, calls to directory assistance, and intrastate long distance calls are usually placed over standard trunks.

All trunks are not "standard trunks." Trunks can have special call rating formulas associated with them. If you want to modify the standard tariff for calls made over some trunks, or have special lines (WATS, tie, foreign exchange) in your system, you will have to program the Trunk Database. Your programming will reflect the cost of these special services plus any additional charges you wish to add.

The PL costs each call according to the trunk over which it is placed. There are six types of trunks:

- Type 0. Standard trunks.
- Type 1. Standard trunks with surcharges.
- Type 2. Tie line.
- Type 3. Foreign exchange.
- Type 4. WATS line.
- Type 5. Dedicated OCC.

## Section 11/Database Descriptions

The key to Trunk Database programming is the standard tariff. The standard tariff is assigned a value of 100% in the Trunk Database. All non-standard trunks (types 1 through 5) are costed at some percentage of the standard tariff. The range for this value is 0% to 200%. You can see that you can substantially reduce or increase the standard tariff according to your services and needs.

In addition to a percent of the standard tariff, you can add a cost per minute and/or cost per call to each call placed over a non-standard trunk.

Programming for trunk types 1 through 5 modifies the standard tariff. For example, calls made over WATS lines are costed at a special discount rate. You are charged hourly instead of by the minute as you are for most calls. The PL can rate your WATS calls accurately. All you have to do is identify your WATS trunk as a type 4 trunk and program the cost associated with it.

Calls made over trunk types 0 and 1 are rounded up to the nearest whole minute. Calls made over trunk types 2, 3, 4, and 5 can be rounded to the nearest six second interval if your phone system includes that data in the call record.

---

Let's look at an example of programming for a simplified telephone system. This simplified system includes the following:

- One standard trunk (also referred to as a local line).
- One WATS line.
- One foreign exchange line.

Section 11/Database Descriptions

Trunk Database Programming  
for Your Standard Trunk

Stage	Description	Programmed Value
1	Trunk Number	246810
2	Trunk Type	0
3	% Standard Tariff	100
4	Cost/minute	0
5	Cost/call	0

Trunk Database Programming  
for Your WATS Line

Stage	Description	Programmed Value
1	Trunk Number	246815
2	Trunk Type	4
3	% Standard Tariff	0
4	Cost/minute	20
4	Cost/call	0

Trunk Database Programming for  
Your Foreign Exchange Line

Stage	Description	Programmed Value
1	Trunk Number	246820
2	Trunk Type	3
3	% Standard Tariff	90
4	Cost/minute	0
5	Cost/call	25

## Section 11/Database Descriptions

Let's look briefly at the effect this programming has on a four minute call. Assume the standard tariff is \$ 0.75 per minute.

A four minute call made over a standard trunk -- type 0 -- will be costed at 100% of the standard tariff. That is 100% of \$ 0.75.  $\$ 0.75 \times 4$  minutes is \$3.00 for the call.

---

A four minute call made over a WATS trunk -- type 4 -- will be costed a 0% of the standard tariff. That is, 0% of \$ 0.75.  $\$0.00 \times 4$  minutes is \$0.00 for the call. But wait! The PL isn't done. You have programmed an additional cost per minute in keeping with your WATS rates.

The PL will calculate a cost per minute of \$ 0.20.  $\$ 0.20 \times 4$  minutes is \$ 0.80. The total for this call is \$0.80.

---

A four minute call made over a foreign exchange trunk -- type 3 -- will be costed at 90% of the standard tariff. That is, 90% of \$ 0.75 or,  $0.68 \times 4$  minutes is \$2.72. In addition to this, the PL will add a cost per call of \$ 0.25. The total for this call is \$2.97.



## Section 11/Database Descriptions

Press **SELECT** in stage 1 to exit the database. The PL returns to the idle state once you press **SELECT**.

As your network changes, you may want to delete some trunk numbers. To do this, enter the number of the trunk you want to delete to stage 1. Enter the value "9" in stage 2. The PL deletes the trunk number you entered in stage 1 and returns to stage 1. You can program another trunk, or press **SELECT** to exit the database.

The values you program in this database are reported in the Trunk Database Directory -- selection code 47.

Section 11/Database Descriptions

Trunk Database 65

Stage	Description	Range	Default
1	Trunk Number  Notes: Each call record includes the trunk number.	0-999999	None
2	Trunk Type  Notes: 0 Standard tariff (DDD) 1 Standard tariff with surcharges 2 Tie line 3 Foreign Exchange 4 WATS 5 Dedicated OCC 9 To delete a trunk  If you enter a 0 in stage 2, the database automatically returns to stage 1.	0-5, 9	0
3	% of Standard Tariff  Notes: Less than 100% to decrease. More than 100% to increase.	000-200	100
4	Cost/Minute  Notes: This additional cost does not apply to standard trunks -- type 0.	0000-1000	0
5	Cost/Call  Notes: This additional cost does not apply to standard trunks -- type 0.	0000-1000	0

Equal access refers to a new way to access various long distance services. Recently, we've been bombarded with special advertising for equal access long distance services. This is because a recent court decision ruled that consumers should be able to access all long distance carriers on an equal basis. That is, by dialing 1+, just as you would when using AT&T. Thus the term "equal access."

Equal access is not yet available nationwide. If equal access is available in your area, you will be asked to choose a primary long distance carrier from the the group of those available in your area. You may also choose a number of alternate long distance carriers.

Here's an example: Let's say you choose AT&T as your primary long distance carrier. Your company, however, makes a large volume of calls to the Northeast. After some research, you find it is more economical to use MCI in making calls to the Northeast. You can choose MCI as an alternate, or secondary long distance carrier.

---

#### Accessing Primary and Secondary Carriers

The PL recognizes and costs calls made via your primary and secondary carriers by the access code you dial. How do you differentiate between your primary and alternate carrier(s)? A simple coding system does the trick. You access your primary carrier in the traditional way: dial 1+, the area code, and the phone number. You access your alternate carrier(s) by dialing a 10XXX code, 1+, the area code, and the phone number.

10XXX takes the place of 1+ when dialing an alternate carrier. 10XXX is really 1+ 0+ and a unique three digit code. For example, in your area of the country, Sprint's 10XXX code may be 10777 (777 is the three digit code that identifies Sprint). To make a long distance call using Sprint as an alternate carrier, dial 10777, 1+, the area

code, and the phone number.

To recap: When you make a long distance call using your primary equal access carrier, dial 1+ and the ten digit phone number. Dial a five digit access code (10XXX), 1+, and the ten digit phone number to make a long distance call using an alternate equal access carrier.

Call Rating Formulas  
\_\_\_\_\_ for Primary and Secondary Carriers

The PL recognizes and costs calls made via your primary and secondary carriers by the access code you dial (1+ or 10XXX+). Remember, the standard tariff for your primary carrier (1+) is preprogrammed into your software module. Costing for these calls is automatic.

It is recommended that you allow the PL to cost calls made via your primary equal access carrier according to their standard tariff. You may, however, modify standard tariff costing. In modifying the standard tariff, you can specify that primary carrier calls be costed at a percentage of the standard tariff. In addition, you can specify an added cost per minute and/or cost call. You specify this call rating formula for your primary carrier in the Equal Access Database. The Equal Access Database determines the "base rate" for all equal access calls.

Once you program the call rating formula for your primary carrier, program rates for your alternate carrier(s). The programming options for alternate carriers are the same as those for your primary carrier. For each alternate carrier, you specify the percent of the standard tariff you want applied to those calls. You can also specify an added cost per minute and/or cost per call.

To sum up: The PL recognizes and costs calls made

## Section 11/Database Descriptions

via your primary and secondary carriers by the access code you dial (1+ or 10XXX+). Once the PL identifies a call as being made via your primary or alternate carrier, Equal Access Database pricing is applied. These values, which you specify in the Equal Access Database, determine the base rate for each equal access (long distance) call.

---

### The Trunk Database Affect

If you have equal access, the PL applies call rating formulas in this order:

1. Equal Access Database pricing.
2. Trunk Database pricing.

Trunk Database pricing can affect Equal Access Database pricing. Once the base rate of an equal access call is determined, this value can be modified by the Trunk Database.

It is important to remember that all calls are placed over trunks. Each trunk has a call rating formula associated with it. (Remember, these are the values you programmed into the Trunk Database). Trunk Database pricing is applied after the Equal Access Database determines the base rate for each equal access call.

## Section 11/Database Descriptions

It is possible, therefore, to modify Equal Access Database pricing when you program the Trunk Database. This effect is not always desirable, so let's review some basics of Trunk Database pricing. You might want to review the discussion of the Trunk Database on pages 2.1 or 10.10. Remember, there are six types of trunks:

- Type 0. Standard tariff line
- Type 1. Standard tariff with surcharges
- Type 2. Tie line
- Type 3. Foreign exchange line
- Type 4. WATS line
- Type 5. Dedicated OCC line

Trunk types 1 through 5 can modify Equal Access Database pricing. With equal access, the Trunk Database considers the base rate determined by the Equal Access Database to be the standard tariff. Therefore, type 0 trunks -- standard tariff -- never modify Equal Access Database pricing. This is because type 0 trunks are programmed to accept 100% of the base rate determined by the Equal Access Database.

Trunk types 1 through 5 are programmed to cost calls at a percentage of the base rate determined by the Equal Access Database, plus an additional cost per minute and/or cost per call.

To be sure equal access calls are costed according to the values you program into the Equal Access Database, make sure they are routed over type 0 trunks. Equal access calls placed over trunk types 1 through 5 will be costed according to some modified version of Equal Access Database pricing. This is rarely desirable.

## Section 11/Database Descriptions

There are exceptions. You may want to override Equal Access Database pricing. That is, ignore the base rate established by the values you have programmed into the Equal Access Database.

A good example of this would occur if you had both equal access and WATS lines in your telephone system. In this case, your interest in programming the call rating databases is to keep Equal Access and Trunk Database programming separate.

Remember, the Trunk Database modifies Equal Access Database programming. It is possible to program the Trunk Database to ignore Equal Access Database pricing entirely. You don't want your WATS lines to pick up any equal access pricing -- program the Trunk Database to ignore Equal Access Database pricing.

The example below shows you how to do this.

Equal Access Database

Stage	Description	Programmed Value
1	Access Code	10
2	% Standard tariff	100
3	Cost/minute	0
4	Cost/call	0

Trunk Database

Stage	Description	Programmed Value
1	Trunk number	12
2	Trunk type	4 (WATS)
3	% Standard tariff	0
4	Cost/minute	20
5	Cost/call	0

## Section 11/Database Descriptions

Look at the example of Equal Access Database programming. Stage 2 of the database instructs the PL to cost all calls made via your primary equal access carrier at 100% of the standard tariff.

Remember, the standard tariff is comprised of your primary carrier's rates. These are preprogrammed into the software module. There are no additional costs -- cost per minute or cost per call -- associated with your primary carrier. This is generally the case, although you do have the option of programming additional costs.

Let's assume the standard tariff for a particular call is \$ 0.75 per minute. According to the Equal Access Database, a four minute call will cost \$3.00.

Now look at the example of Trunk Database programming. Stage 3 of the database instructs the PL to ignore the base rate calculated by the Equal Access Database. In this example that is  $0 \times \$3.00$ , or \$0.00.

Stages 4 of the Trunk Database is programmed to add a cost of \$ 0.20 per minute. For a four minute call that's \$ 0.80. The total cost of your four minute WATS call will be \$0.80. As you can see, there's quite a difference in cost.

---

The Equal Access Database has room for one primary carrier and nine secondary carriers. You may or may not need to program values for all available spaces. You can access the database to add and delete carriers. Each time you access the database, the data window displays "1" for your primary carrier.

Enter the access code for a new alternate carrier now. You will not erase the values presently programmed into the database. The PL will accept the new carrier if there is space in the database. If you have already programmed ten carriers (one primary and nine alternates) the PL beeps. Delete a carrier to make room for the new one.

You may want to delete an equal access code. To do this, enter the equal access code you want to delete in stage 1. Enter "999" in stage 2. The PL



## Section 11/Database Descriptions

delete in stage 1. Enter "999" in stage 2. The PL deletes the value you entered in stage 1 and returns to stage 1. Press SELECT to exit the database or program the database for another equal access carrier.

To overwrite existing values for an equal access code, enter the equal access code in stage 1. Just reprogram the remaining database stages.

### Equal Access Database 66

Stage	Description	Range	Default
1	Primary/secondary Carrier	1 or 10000-10999	1
2	%of Standard Tariff  Notes: Less than 100% to decrease. More than 100% to increase. 999 to delete the carrier code in stage 1.	000-200, 999	100 (Primary) 80 (Secondary)
3	Cost/Minute  Notes: This is an additional fixed cost. Program up to \$10.00 in pennies.	0000-1000	0
4	Cost/Call  Notes: This is an additional fixed cost. Program up to \$10.00 in pennies.	0000-1000	0

OCCs are "Other Common Carriers" like GTE Sprint, Western Union, and MCI. OCCs are an option to traditional long distance service in areas of the country that do not have equal access. There is no overlapping relationship between the Dial-Up OCC and Trunk Databases as there is between the Equal Access and Trunk Databases.

There are two ways to access an OCC: via the dial-up method or a dedicated OCC trunk. Program the Dial-Up OCC Database only if you use the dial-up method to access your OCC. Program the call rating formula for dedicated OCC trunks in the Trunk Database.

Dedicated trunks are specially installed, at your request. They run from your OCC to your phone system. You don't have to dial an access code when you have a dedicated trunk. Just dial 1+.

When you make a dial-up OCC call, you have to dial a code to access your carrier, then dial the number. The PL defines any number dialed that is longer than 14 digits as a dial-up OCC call. Credit card calls are not costed as dial-up OCC calls. These calls have a base price of \$00.00 and are costed by the Operator Assisted Surcharges Database -- 81.

The PL costs dial-up calls at some percentage of the standard tariff that you specify. See the Description of Trunk Database on page 10.9 for a discussion of the standard tariff. In addition to a percent of the standard tariff you can specify an added cost per minute and/or cost per call for all dial-up calls.

The call rating formula you develop should be based on the average cost of your OCC. This is true whether you access via a dedicated trunk or dial-up service. The average cost can be calculated as a percent of the standard tariff. Check your monthly OCC bill, this percentage may be listed on it.

## Section 11/Database Descriptions

Here's an example of an OCC dialing pattern:

Access Number	Access Code		
950-1234-	123456-	617-532-6990-	246
		Number you are dialing	Additional digits

The PL reads any 14+ digit as a possible dial-up OCC call. It is important to remember that the PL always reads the last ten digits first. The PL looks for a valid long distance number. If the number is valid, the call is flagged as a dial-up OCC call.

The number may not be a valid long distance number, but a valid local call. In that case the call is handled according to the values you program into the Local Call Parameters Database.

If the number is not a valid local or long distance number, the PL lists the last 12 digits as an invalid call. This number appears on reports along with the characters "IV."

Your OCC may require you to dial an additional code after you dial the actual number. To make sure that the PL reads the number dialed, and not some portion of that number plus additional digits, program the number of additional or trailing digits in stage 4 of the database. Using this example, you would program a "3" in stage 4 of the database. The PL will ignore the "246" and read the correct number dialed.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

Dial-Up OCC Database 67

Stage	Description	Range	Default
1	%of Standard Tariff  Notes: Less than 100% to decrease. More than 100% to increase.	000-200	80
2	Cost/Minute  Notes: This is an additional fixed cost. Program up to \$10.00 in pennies.	0000-1000	0
3	Cost/Call  Notes: This is an additional fixed cost. Program up to \$10.00 in pennies.	0000-1000	0
4	Ignore Trailing Digits	00-14	0

The Station Database identifies stations as guest or administrative. You can program the database so calls originating from one guest station are billed to another. You can also set a credit limit for any guest station. There are 98 administrative departments. Assign any number of administrative stations to each department.

Program the station numbers into stage 1 of the Station Database. Next, define each station as guest or administrative. The default for stage 2 of this database is 0 -- guest station. This will save you some time, as most of your stations are guest stations.

You can assign administrative stations to one of nine departments. Program the station number in stage one and the department number -- 1 through 98 -- in stage 2.

Stage 3 of this database allows you to charge calls made by one guest station to another, or recipient station. For example, assume a group representing a single company checks in to rooms 1334 to 1340. You can bill calls made by all seven rooms to a single room, 1334, for example.

In this example, rooms 1335 to 1340 are referred to as "sender" stations. The PL transfers all call records made by these stations to the "recipient" station -- room 1334.

Let's run through the programming steps for room 1335 (a "sender" station):

- 1 Stage 1, enter "1335."
- 2 Stage 2, press ENTER to retain the default which is guest station.
- 3 Stage 3, enter "1334." (All calls made by room 1335 will be billed to room 1334.)
- 4 The database automatically advances to stage 1. You can program another station, or press SELECT and exit the database.

## Section 11/Database Descriptions

Please note, stage 4 does not apply to any guest station for which you program a recipient station in stage 3.

The symbol # next to a phone number on guest station reports indicates the call was made by a sender station.

---

Stage 4 allows you to put a credit limit on any station programmed into stage 1. The default is 0. 0 allows unlimited credit. You can impose a credit limit of anywhere between \$00.00 and \$999.99. If a station exceeds the programmed credit limit, the PL transmits the following message to the printer:

```
STATION XXXXX HAS EXCEEDED CREDIT LIMIT  
CREDIT = $XXX.XX      BILLED AMOUNT = $XXX.XX
```

Remember, credit limits do not apply to sender stations. The PL does not prompt you to enter a value in stage 4 if you specify a recipient station in stage 3. Instead, the database automatically advances to stage 1.

---

You may delete any station number, guest or administrative with the code 999. Enter the station number you want to delete into stage 1. Enter the code 999 in stage 2. The database returns to stage 1. Program another station or press SELECT to exit the database.

## Section 11/Database Descriptions

## Station Database 68

Stage	Description	Range	Default
1	Station Number	0-99999	None
2	Guest/Admin Station  Notes: 0 Guest station 1-998 Administrative station  999 deletes the station number you program in stage 1.	0-98, 999	0
3	Billed Station  Notes: The database does not advance to stage 4 if you program a recipient station in stage 3.	0-99999	0
4	Credit Limit  Notes: \$00.00 to \$999.99. Program in pennies.	0-99999	0

---

Valid Call Timing Database 69

The Valid Call Timing Database allows you to fine tune the way the PL costs calls. Use this database to make sure the PL calculates a base rate that is as near as possible to telephone company calculations.

Your telephone system begins timing each call before the connection is made. The telephone company on the other hand, doesn't start timing the call until someone answers.

To fine tune the PL, you must determine two factors:

- Valid Call Timing Threshold
- Set Up Time

---

A call must exceed the valid call timing threshold before the PL can store and cost it. Even before the PL calculates the actual length of the call (using the set up time), it determines whether or not the call is valid. The PL cannot consider a call valid until it exceeds the valid call timing threshold.

Your phone system begins to time each call when you begin to dial. The phone company does not begin to time a call until someone answers. You can see that there will be calls made that are never answered. Your telephone company won't charge you for these. Program a valid call timing threshold so the PL won't either.

You must estimate the valid call timing threshold for your telephone system. The default value of 42 seconds is a good starting point. Next, review your telephone bills. Most phone companies round phone calls up to the nearest minute. If this is the case, leave the default value of 42 seconds when you program this database.



## Section 11/Database Descriptions

When your phone bills come in, compare the total number of calls according to the phone company with the total number of calls according to the PL. Chances are the PL has recorded a different number of calls than the telephone company. If the totals are the same, great! don't change a thing.

If the PL has recorded more calls than the phone company, some of them are calls that were never completed. For example, you call someone and don't get any answer. The phone company doesn't consider this a call. You'll have to increase the valid call timing threshold slightly.

If the PL hasn't recorded as many calls as the phone company, the PL is missing calls the telephone company considers valid. You'll have to decrease the valid call timing threshold slightly.

Wait until your next phone bill comes and compare the totals again. Based on the result, adjust the valid call timing threshold.

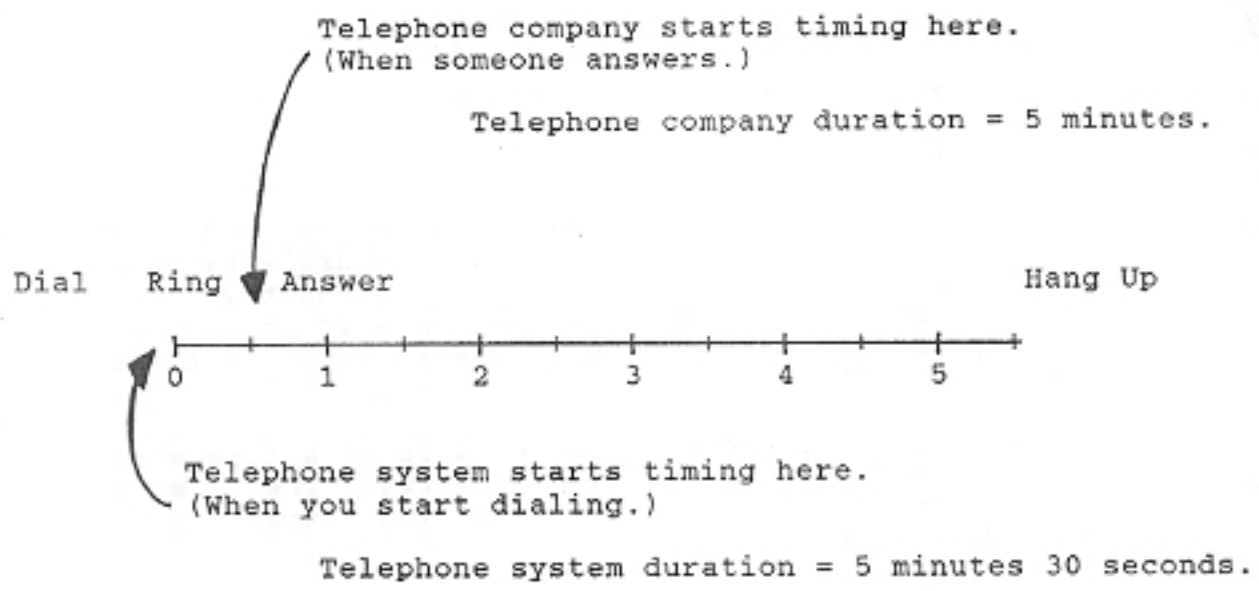
If your telephone company is one of the few to bill in 1/10 minute increments, review your bills for the shortest call recorded. Based on this figure you can determine your valid call timing threshold. Check the accuracy of your programming following the comparisons described above.

## Section 11/Database Descriptions

Set up time is the duration between the moment you begin to dial and the first ring. Your phone system begins to time each call when you begin to dial. The phone company does not begin to time a call until someone answers. You can see there's a discrepancy here.

The PL subtracts the set up time you program from the length of the call as determined by your telephone system. A description of how to estimate set up time begins on page 10.32.

How the PL Determines the Length of a Call



To correct this discrepancy, the PL subtracts the set up time from the duration according to your telephone system:

$$5 \text{ minutes } 30 \text{ seconds} - 30 \text{ seconds} = 5 \text{ minutes}$$

(telephone company duration)

## Section 11/Database Descriptions

Here's one way to estimate the set up time for your telephone calls. You need an assistant and a stop watch.

Choose three sample phone numbers:

- A local number
- A 1+ number
- A 1+ area code number

Determine when you can expect both normal and peak telephone traffic. Normal and peak hours vary from location to location. Your industry and application also have a bearing on what is normal and peak for you. In most cases, peak traffic occurs 9:30 AM to 10:30 AM and 1:30 PM to 2:30 PM.

First, make your sample phone calls at a time when you expect normal telephone traffic. Then, make the same calls at a time when you expect peak telephone traffic.

As you make each call, note three things:

- The time you take your receiver off the hook.
- The time someone answers on the other end.

Total the elapsed time for all six calls and divide by six. The answer is the average set up time for your domestic calls.

Program the values you come up with into the Valid Call Timing Threshold Database. Follow the same procedure to determine set up time for international calls.

Section 11/Database Descriptions

Your goal in programming this database is to allow the PL to duplicate telephone company costing. The PL calculates the cost of each call after subtracting the set up time from the length of the call recorded by your telephone system. Once the length of the call is determined, the call is costed according to the values programmed into the Trunk and Equal Access (or Dial-Up OCC) Database.

Follow similar procedures to determine the valid call timing threshold and set up time for international calls.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

Valid Call Timing Database 69

Stage	Description	Range	Default
1	Domestic Valid Call Timing Threshold  Notes: Program this value in seconds.	01-99	42
2	Domestic Set-up Time  Notes: Program this value in seconds. This value must be smaller than the value in stage 1.	01-98	30
3	Int'l Valid Call Timing Threshold  Notes: Program this value in seconds.	01-99	42
4	Int'l Set-up Time  Notes: Program this value in seconds. This value must be smaller than the value in stage 3.	01-98	30

Local Call Parameters Database 70

Program this database to accept or reject local calls. Stage 1 of this database is programmed to accept local calls. If your application for the PL does not require you to track local calls, program this database to reject them.

Stage 2 determines whether or not a cost will be associated with each call. All local calls are assigned a base rate according to the telephone company rates. These rates are pre-programmed into the software module. The pre-programmed rates are referred to as "measured rates." You may want to track local calls and not care particularly about the cost. In this case, you have the option of applying "unlimited rates." Unlimited rates assign a base rate of \$00.00 to each local call.

Once the PL assigns a base rate to local call, that rate may be modified by Trunk Database programming. See page 10.10 for a description of the Trunk Database. This is not usually the case as most local calls are placed over standard trunks. Calls made over standard trunks are costed according to the rates that are pre-programmed into the software module.

All local calls are included in any Trunk/Line Utilization Report you print -- regardless of the way you program this database. This ensures accurate reporting of trunk/line usage.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

Local Call Parameters Database 70

Stage	Description	Range	Default
1	Accept/Reject Local Calls	0-1	1
	Notes: 0 Reject local calls. 1 Accept local calls.		
2	Measured/Unlimited Rates	0-1	1
	Notes: 0 Unlimited rates. 1 Measured rates.		





Section 11/Database Descriptions

Incoming Call Parameters Database 71

Stage	Description	Range	Default
1	Accept/Reject	0-1	0
	Notes: 0 Reject 1 Accept		

This database allows you the option of printing SMDR data as the PL receives it. This report is primarily a diagnostic tool. There are two types of echoes:

- o Standard echo
- o Hexadecimal echo

A standard, or raw echo, shows the SMDR data exactly as the telephone system transmits it. The standard echo includes control characters (carriage return, line feed, form feed). A hexadecimal echo shows the SMDR data, including control characters, in hexadecimal form.

If you want a standard echo with no control characters, choose the filtered echo option.

The PL will flag rejected calls with one of the following messages:

```
*****Local call rejected*****  
*****Incoming call rejected*****  
*****Short call rejected*****
```

Each message indicates that a call has been rejected because of values you have programmed. "Local call rejected" reflects Local Call Parameters Database programming. "Incoming call rejected" reflects Incoming Call Parameters Database programming. "Short call rejected" reflects Valid Call Timing Database programming. Reprogram any of the databases above if the PL is rejecting calls you want stored.

In the case of data overflow -- the printer baud rate is less than the SMDR baud rate -- the PL stops any echo.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

Echo All Calls Database 72

Stage	Description	Range	Default
1	Echo All Calls	0-3	0
	Notes:	0 No echo 1 Standard echo 2 Filtered echo 3 Hexadecimal echo	
2	Echo Rejected Calls	0-1	0
	Notes:	0 Do not label rejected calls 1 Label rejected calls	

The Memory Full Database prompts the PL to print up to eight reports when the system's memory is filled to capacity. You don't have to worry about losing call records with this feature.

Look at the front panel of your PL. The data window displays the percent of system memory full whenever the PL is not performing some function. This is called the idle state. For example, when system memory is 45% full, the data window looks like this:

CODE	STAGE	DATA
<input type="checkbox"/>	<input type="checkbox"/>	--45--

The data window looks like this when memory is filled to the value you program in this database:

CODE	STAGE	DATA
<input type="checkbox"/>	<input type="checkbox"/>	-FULL-

You can program the PL so that the Memory Full Database is activated when memory is filled to any value between 10% and 85%. The default memory full value is 85%. Programming memory full at 85% leaves a buffer in memory for call records received as the PL reaches memory full.

This buffer is very important. The PL queues but does not store calls when printing is in progress. The PL also queues calls during the Data In/Valid Call Test. It is important for you to keep an eye on the memory full value displayed in the data window. Be aware that, as the PL approaches memory full, you run the risk of losing call records when printing and testing is in progress. Calls are still being received while the PL is performing either of these functions.

## Section 11/Database Descriptions

If the data window indicates 80% memory full, only 20% of total memory capacity is available for queued reports. Queued reports require twice as much memory space as stored calls. Overflow can occur very quickly.

---

After you program the memory full value, program the selection codes of the reports you want to print when memory is full. Program these report selection codes in stages 2 through 9. There are four default report selection codes in the system. These are:

- Station Activity Report            20
- Station Summary Report            30
- Night Audit Summary Report       51
- Night Audit Activity Report       52

These four reports provide you with a copy of all the call records in the activity and summary databases. You can change the default values by entering new values in stages 2 through 5. Stages 6, 7, 8, and 9 are not pre-programmed. You decide whether or not you want additional reports to print when memory is full.

Please note the reports programmed as defaults in the Memory Full Database prompt both activity and summary memory management decisions. Therefore, memory full printing will prompt both activity and summary memory management decisions.

It is not necessary to program all of the stages, 2 through 9. For example, you may want only two reports to print when memory is full. Enter report selection codes in stages 2 and 3. Enter 0 in stage 4 to exit the database. Exit this database by pressing 0 in any stage, 2 through 9.

## Section 11/Database Descriptions

Once you change a default value, you erase any subsequent default values. For example, if you replace the default in stage 4 (Station Summary Report) with the Station Database Directory, the default values for stages 5 and 6 are automatically erased. If you want any other reports, you will have to enter report selection codes beginning in stage 5.

You may want to keep the default values but add up to three additional reports. To do this, press ENTER as each default value is displayed. When you see the cursors in the data window in stage 7, begin entering additional report selection codes.

To disable the Memory Full Database, enter 99 in stage 1. It is not recommended that you do this. You will have to keep a very close eye on the percent of memory full if you disable this feature. You run the risk of losing call records if memory reaches 100% before you realize what's happening. Any call records the PL receives after memory reaches 100% are lost.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

Memory Full Database 73

Stage	Description	Range	Default
1	% Memory Full  Notes: 99 disables the memory full feature.	10-85, 99	85
2	Memory Full Report 1  Notes: Enter 0 to exit the database in stages 3 through 9.	Report Selection Code	20
3	Memory Full Report 2	Report Selection Code	30
4	Memory Full Report 3	Report Selection Code	51
5	Memory Full Report 4	Report Selection Code	52
6	Memory Full Report 5	Report Selection Code	None
7	Memory Full Report 6	Report Selection Code	None
8	Memory Full Report 7	Report Selection Code	None
9	Memory Full Report 8	Report Selection Code	None



Use the Auto Print Database to design up to five packages of five reports each that will print automatically. You specify the auto print schedule. The PL can automatically print reports on a daily, weekly, semi-monthly, or monthly schedule.

The following list describes the cycles (frequency of printing) and parameters (day to print) from which you can choose.

- Daily. No parameters.
- Weekly. Parameters are 1 through 7.  
Sunday is 1.  
The default is 1.
- Semi-monthly.  
Parameters are 1 through 31.  
Choose two.  
The default is 116 (the  
1st and 16th of the month).
- Monthly.  
Parameters are 1 through 31.  
The default is 1.

---Example---

Let's run through a programming example. Assume you want an Auto Print package of reports to print every Monday. This package includes a Station Activity Report and a Network Summary Report. You want this information on your desk shortly after 8:00 every Monday morning. No problem!

Stage 1 of the database is called the Auto Print Package. Each Auto Print Package is numbered, 1 through 5. To program according to this example, enter a "1" in this stage. The next time you program a package, you will enter a 2 in stage 1. "2" labels the second Auto Print Package.

## Section 11/Database Descriptions

Stage 2 of the database defines the Cycle, or frequency with which you want the package to print. For this example, enter a "2" in stage 2. "2" is the code for a weekly printing cycle.

Stage 3 defines the Parameter -- the day on which you want the report to print. See the list of parameters on page 10.46. For this example, enter a "2" in stage 2. "2" is the code for Monday.

Program stages 4 through 8 to define the reports you want in your Auto Print Package. Each package can include up to five reports. For this example, you only want two reports in your package. Enter a "20" for Station Activity Report in stage 4. Enter a "32" (Network Summary Report) in stage 5.

In this example, you do not want to program stages 6, 7, and 8. Enter "0" in stage 6. The database automatically advance to stage 9. Enter 0 in stages 4 through 8 to advance to stage 9. Enter 0 in any stage, 4 through 8, to advance to stage 9.

Stage 9 defines the time of day you want the reports to print. Always program this stage in military time -- the twenty-four hour clock. For this example, enter 800 for stage 9. The report will begin printing at 8:00 AM, you will have it on your desk shortly thereafter.

---

Notice that in stage 2 you can enter a 0 for "no report." Use this option to temporarily disable one of your Auto Print Packages.

You might want to disable a package while you're on vacation for two weeks. To do this, enter the correct indicator in stage 1 and a 0 in stage 2. This does not delete the values you have programed into stages 3 through 9; it merely prevents them from printing until you activate the auto print cycle as described below.

## Section 11/Database Descriptions

If you have requested Auto Print, and your reports require memory management decisions, and you are not present to make the decision before the next Auto Print cycle, the PL will "cancel and confirm" the first memory management decision. All data will be retained in system memory. The reports in the next Auto Print Cycle will contain both the previous and current data. The PL will then ask for a memory management decision. The PL will continue to ask for memory management until one is made.

When you return from vacation, reactivate the weekly package by entering the correct indicator in stage 1 and a 2 -- for weekly cycle -- in stage 2.

Remember, you can always change the cycle or reports in a package. To do this, enter the appropriate Auto Print Package in stage 1 and overwrite any of the subsequent values you have programmed for that package.

The values you program in this database are reported in the Miscellaneous Database Directory -- selection code 48.

Section 11/Database Descriptions

Auto Print Database 74

Stage	Description	Range	Default
1	Auto Report Package	1-5	None
2	Cycle (Frequency)	0-4	None
	Notes: 0 No report 1 Daily 2 Weekly	3 Semi-monthly 4 Monthly	
3	Parameter (Day)	1-31	Below
	Notes: Daily reports: no options, no default. The database advances to stage 4.		
	Weekly reports: 1-7. Sunday is 1. The default is 1.		
	Semi-monthly reports: 1-31. The default is 16. Reports will print on the first and sixteenth day of the month.		
	Monthly reports: 1-31. 31 causes reports to print on the last day of the month. The default is 1.		
4, 5, 6, 7, 8	Auto Reports	Report Selection Codes	None
	Notes: Enter 0 in stages 5, 6, 7, or 8 to advance to stage 9.		
9	Time of Day	0000-2359	2359 (11:59 PM)
	Notes: 0000 is midnight, 12:00 AM 1200 is noon, 12:00 PM		

## Section 11/Database Descriptions

### -- Surcharge Databases --

Databases 80, 81, and 82 add surcharges according to call types. The following table may help you as you become familiar with these databases. The table below lists different types of calls and sample numbers. Next to each example is the number of the database which will cost the call, as well as the appropriate database stage.

These databases differentiate between two types of long distance calls: Intrastate and interstate.

**Intrastate:** long distance calls made within your state. These calls take one of the following forms:

1+NNX-XXXX

1+NPA (not your own)+ NNX-XXXX

**Interstate:** all long distance calls made to destinations outside your state.

Section 11/Database Descriptions

Sample Call Types

Type of Call	Sample Number Dialed	Database	Stage
Local	532-6990	80	2
Intrastate Long Distance	1-275-2500	80	3
Interstate Long Distance	1-207-546-7339	80	5
Direct Dial International	011-39-1234123	80	7
Operator Assistance	0	81	1
Operator Assist International	01-39-1234123	81	1
Credit Card	0-532-6990-14 digit code	81	2
	0-203-731-1234-14 digit code	81	2
950	950-5643-authorization code	81	3
900	1-900-532-6990	81	4
800	1-800-697-2000	81	5
700	1-700-546-7339	81	6
Local Directory Assistance	411	82	1
Intrastate Directory Assistance	555-1212	82	2
Interstate Directory Assistance	1-203-555-1212	82	3



## Section 11/Database Descriptions

## Lodging Surcharges Database 80

Stage	Description	Range	Default
1	Apply Surcharges to Guest/Admin	0-1	None
	Notes: 0 Guest station 1 Administrative station		
2	Local Call Fixed Cost Adder	0-1000	0
	Notes: Range is \$00.00 to \$10.00. Program all dollar values in pennies.		
3	Intrastate Long Distance Fixed Adder	0-1000	0
	Notes: Range is \$00.00 to \$10.00.		
4	Intrastate Long Distance % Adder	0-200	0
	Notes: 0% to 200%.		
5	Interstate Long Distance Fixed Adder	0-1000	0
	Notes: Range is \$00.00 to \$10.00.		
6	Interstate Long Distance % Adder	0-200	0
	Notes: 0% to 200%.		
7	International Fixed Cost Adder	0-1000	0
	Notes: Range is \$00.00 to \$10.00.		
8	International % Adder	0-200	0
	Notes: 0% to 200%.		
9	Surcharge Limit	0-9999	0
	Notes: 0 = Unlimited surcharge. Program in pennies.		



## Section 11/Database Descriptions

### \_\_\_\_\_Operator Assisted Surcharges Database 81

You can program the Operator Assisted Surcharges Database -- selection code 81 -- to add surcharges to operator assisted, credit card, 950, 900, 800, and 700 calls.

Surcharges for operator assisted calls -- the value you program in stage 1 -- only apply to guest stations. The base price for operator assisted calls is \$00.00. Your guest will not be charged unless you program surcharges into this database. Surcharges you program in stages 2 through 6 apply to both guest and administrative stations.

Any surcharges you program for 800 calls will also be applied to 1-800-555-1212. The Directory Assistance Surcharges Database -- 82 -- does not affect calls to 1-800-555-1212.

All of the surcharges you program in the Operator Assisted Surcharges Database are fixed adders. You can program up to \$10.00 in additional charges to the following types of calls:

- Operator assisted calls
- Credit card calls
- 950 calls
- 900 calls
- 800 calls
- 700 calls

Program all dollar values in pennies.

Section 11/Database Descriptions

Operator Assisted Surcharges Database 81

Stage	Description	Range	Default
1	OA Fixed Adder  Notes: Added to base rate of \$00.00. Program in pennies. ONLY APPLIES TO GUEST STATIONS.	0-1000	0
2	Credit Card Fixed Adder  Notes: Added to base rate of \$00.00. Program in pennies.	0-1000	0
3	950 Fixed Adder  Notes: Added to base rate of \$00.00. Program in pennies.	0-1000	0
4	900 Fixed Adder  Notes: Added to base rate of \$00.00. Program in pennies.	0-1000	0
5	800 Fixed Adder  Notes: Added to base rate of \$00.00. Program in pennies.	0-1000	0
6	700 Fixed Adder  Notes: Added to base rate of \$00.00. Program in pennies.	0-1000	0

Section 11/Database Descriptions

\_\_\_\_Directory Assistance Surcharges Database 82

Program the Directory Assistance Surcharges Database -- selection code 82 -- to add surcharges to 411 and 555 calls. The surcharges you program in this database are fixed adders that only apply to guest stations.

You can add a surcharge of up to \$10.00 to each of the the following types of calls:

- 411 calls
- 555 calls within your NPA (area code)
- 555 calls to foreign NPAs

Program all dollar values in pennies.

Calls to 1-800-555-1212 are not affected by this database. Surcharges to these calls are calculated according to the values you program into the Operator Assistance Surcharges Database -- selection code 81.

Directory Assistance Surcharges 82

Stage	Description	Range	Default
1	411 Fixed Adder	0-1000	0
	Notes: Program all dollar values in pennies.		
2	Home NPA Fixed Adder	0-1000	0
3	Foreign NPA Fixed Adder	0-1000	0

You can program the Taxes Database -- selection code 83 -- to add federal, state, and local taxes to calls. Taxes only apply to calls made by guest stations. The final cost to your guest, including taxes, appears on the Guest Check-Out and Night Audit Activity Reports. Taxes are also reflected in the totals listed on the Night Audit Summary Report.

The tax structure you create by programming the Taxes Database will not apply to "Other" types of calls. "Other" types of calls include:

- Operator Assisted calls
- Directory Assistance calls
- 700 calls
- 800 calls
- 900 calls

Taxes are not applied to "other" calls since, in most cases, the telephone company allows for a variable number of free calls for each of these call types.

You can however add a fixed adder to these calls by programming the Operator Assisted Surcharges Database (81), pages 11.53 - 11.54, and the Directory Assistance Surcharges Database (82), pages 11.55 - 11.56.

Program the tax factors in the following form: .XXXX. The range for the tax factor is .0000 to .9999. For a state tax factor of 4%, program the tax factor as "04." You don't have to add trailing zeroes.

## Section 11/Database Descriptions

You can add federal, state, or local taxes to the following types of calls:

- Local calls
- Intrastate long distance calls
- Interstate long distance calls
- International calls

Stages 4 through 7 of the database prompt you to assign no tax or any combination of federal, state, and local taxes to each of the call types listed above. Each of these options has a code:

- No tax 0
- Local tax 1
- State tax 2
- Federal tax 3

You can assign all three types of to all call categories, excluding "Other." For example, you might want to assign federal, state, and local taxes to interstate long distance calls. The value you enter in stage 6 will include all three codes: 123.

-- See page 11.59 for the Canadian tax table. --

Section 11/Database Descriptions

Taxes Database 83

Stage	Description	Range	Default
1	Federal Tax Factor	0-9999	0
	Notes: Tax factors takes form of .XXXX		
2	State Tax Factor	0-9999	0
	Notes: See Stage 1		
3	Local Tax Factor	0-9999	0
	Notes: See Stage 1		
4	Taxes Applied to Local Calls	000-123	000
	Notes: 0 No tax applied 1 Federal tax applied 2 State tax applied 3 Local tax applied		
5	Taxes Applied to Intrastate Long Distance	000-123	000
	Notes: See stage 4.		
6	Taxes Applied to Interstate Long Distance	000-123	000
	Notes: See stage 4.		
7	Taxes Applied to International	000-123	000
	Notes: See stage 4.		

Section 11/Database Descriptions

Taxes Database -- Canadian Rates 83

Stage	Description	Range	Default
1	Provincial Tax Factor	0-9999	0
	Notes: Tax factors takes form of .XXXX		
2	Local Tax	0-1	0
	Notes: 0 No tax applied 1 Tax		
3	Long Distance Tax	0-1	0
	Notes: 0 No tax applied 1 Tax		
4	International Tax	0-1	0
	Notes: 0 No tax applied 1 Tax		

HOBIC Merge Transmission Parameters Database 86

Merging HOBIC transmissions with PL call record data allows you to cost all operator assisted calls accurately. Recall that the PL cannot cost operator assisted calls because once your guest dials "0", the PL cannot track the actual number then called. The HOBIC system overcomes this, recording the pertinent information and transmitting back to your HOBIC printer.

You can route the HOBIC transmission to the PL instead of a printer. The PL will accept the HOBIC call record and merge it with the call records received from your telephone system. Connect your HOBIC computer directly to the PL serial (or optional serial) port. The PL can accept transmissions at speeds of 300 to 19,200 baud; with 7 or 8 data bits; and odd, even or no parity.

Program the HOBIC Merge Transmission Parameters Database (86) to ready the PL for HOBIC transmission. Identify the port you will be using for HOBIC transmission in stage 1. It is recommended you use a parallel printer for printing PL reports. This leaves the serial port free for HOBIC transmission or the Property Management System Interface (PMS is a separate document). If you plan to take advantage of both options (HOBIC Merge and PMS Interface), you must use the optional serial port for one of these connections. (Refer to "Optional Serial Port Documentation" - a separate document - if you are using this option.)

Stage 2 defines the electrical interface -- RS232 or current loop. Stage 3 defines the timing as asynchronous or synchronous. Stages 4, 5 and 6 set up the transmission speeds, number of data bits, and parity, if any.

Refer to page 11.62 for the HOBIC Merge Data Format Database description.



Section 11/Database Descriptions

HOBIC Merge Transmission Parameters Database 86

Stage	Description	Range	Default
1	HOBIC Port  Notes: 0 No HOBIC Transmission 2 Serial Port 3 Optional Serial Port	0, 2, 3	0
2	Electrical Interface  Notes: 1 RS232 2 Current Loop*	1 - 2*	1
3	Timing  Notes: 1 Asynchronous 2 Synchronous*	1 - 2*	1
4	Baud Rate  Notes: 300, 600, 1200, 4800, 9600, 19.2K	300 - 19,200	300
5	Number of Data Bits  Notes: 7 or 8	7 - 8	8
6	Parity  Notes: 0 None 1 Odd 2 Even	0 - 2	0

\*Option may not be available in this software version.

You should have already connected the HOBIC computer to the PL serial or optional serial port and programmed the HOBIC Merge Transmission Parameters Database (86). Database 87 defines the content and format of HOBIC call records for the PL. Once you program this database, the PL is ready to receive and record HOBIC transmissions. These call records will then be merged with the call records the PL receives from your telephone system to give you a complete record of guest station calls.

HOBIC call records follow a format different from those transmitted by your phone system to the PL. Recall that the software module is preprogrammed to accept call records as they are transmitted by your telephone system. However, the PL is unable to accept HOBIC transmission until you define the content and format of the HOBIC call records. Call records following the format you program will be recognized and accepted by the PL.

To program this database, you must know the HOBIC call record format. Each possible field in the call record is assigned a programming code: a number 1 to 8. Enter these values into the HOBIC Merge Data Format Database (87) in the order in which they are found in the HOBIC call record. The programming codes are:

- 0 To exit the database
- 1 Ignore this field
- 2 Date
- 3 Station (Room Number)
- 4 Time of Day
- 5 Call Duration
- 6 Cost of Call
- 7 Phone Number Dialed
- 8 Call Record Identifier

## Section 11/Database Descriptions

There are no preset programming stages in Database 87. Enter the values 1 through 8 in the order in which they appear in the HOBIC call record. Enter 0 to exit the database. Let's assume the HOBIC call record looks like this:

Date	Station	Phone Number Dialed	Time of Day	Call Duration	Cost
(2)	(3)	(7)	(4)	(5)	(6)

Notice the programming codes listed under each field. Enter the programming codes in the order in which they appear in the call record like this:

Stage 1: 2  
Stage 2: 3  
Stage 3: 7  
Stage 4: 4  
Stage 5: 5  
Stage 6: 6  
Stage 7: 0 (to exit database)

## Section 11/Database Descriptions

### Wake-Up Messages Database 88

Program the Wake-Up Messages Database to transmit wake-up messages and room status information to the printer. The PL can only transmit wake-up messages if your telephone system is programmed to include them in its call record format.

The PL has a buffer that stores incoming call records while you are selecting and printing reports or running diagnostic tests. You can program stage 2 of this database to store up to 100 wake-up messages in this buffer. The PL stores the first 80 characters of each wake-up message.

Please note: this feature works independently of the Echo All Call feature.

### Wake-Up Messages Database 88

Stage	Description	Range	Default
1	Wake-up Messages	0-1	0
	Notes:	0 Do not transmit to printer. 1 Transmit to printer.	
2	Buffer Size	0-100	0
	Notes:	Program this stage to store up to 100 call records of 80 characters each in the buffer.	

Section 12/Other Functions and Features



## Section 12/Other Functions and Features

Introduction.....	12.1
Power Fail Indicator.....	12.2
Selection Code Listing.....	12.3
Dummy Data.....	12.4
Clear Memory.....	12.6
System Initialization.....	12.8
System Tests.....	12.9
Data In/Valid Call Test.....	12.10
Memory Test.....	12.10
Memory Alarm.....	12.11
Front Panel Test.....	12.11
Printer Test.....	12.11
System Specifications.....	12.12





---

Introduction

This section describes a group of features not discussed earlier in the manual. Sections include information on what to do in case of a power failure, how to load and clear dummy data, and how to clear memory. There is also a list of system specifications on page 12.12.

Power Fail Indicator



The PL front panel windows look like this during a power failure:



This display does not change until power returns.

A buzzer sounds at 5 second intervals for the first ten minutes of a power failure. The only way to stop the buzzer during this ten minute period is to restore AC power.

This display changes when one of the following happens:

- You press  or .
- There is another power failure.
- An Auto Print session begins.

Do not move the battery on/off switch to the off position. Without battery backup during a power failure, the PL loses the call records in memory and all database programming. The PL will not accept new calls once the battery is turned off.

Selection Code Listing 59

You can print the complete list of PL selection codes. The selection codes are listed by category, e.g., Activity Reports, Summary Reports, etc.

For a selection code listing

You...

The PL...

1 Press  .

2 Enter selection code 59.

3 Press  .

4 Prints a complete list of selection codes.

There is a set of forty call records that you can load into the PL. This is dummy data. Use it to practice using the PL and/or get an idea of the type of information available in the reports.

You can select reports, make memory management decisions, and program the databases using dummy data. The dummy call records will reside in memory and effect the totals of your reports unless you erase them when you're done. Always erase the dummy data before you connect the PL to the phone system.

If you see strange numbers popping up in your reports, it could be that you forgot to erase the dummy data.


To load dummy data,

You...

The PL...

1 Press  .

2 Enter the selection code 98.

3 Press  .

4 Loads the dummy data.  
The data window displays  
the number of call  
records as they load.

5 Returns to the idle  
state after the dummy  
data is loaded.

6 You can always re-load  
dummy data. Notice the  
data window displays  
the number of records  
already present and decreases  
by one as the PL loads dummy  
call records.

When you finish with the dummy data, use the clear memory function -- selection codes 94 and 95 -- to erase dummy data. If you do not clear memory, the dummy call records remain in memory. Any report you run will include the dummy records.

---

Clear Memory 94, 95, 96

The clear memory selection codes allow you to erase all call records from the activity, summary, and programming databases. This is a time saving step but should not be taken lightly!

Be sure you have a copy of all the reports you are going to want before you clear any of these databases. Once you press ENTER, the data is gone and you begin a new report period.

- To clear activity data 94
- To clear summary data 95
- To clear database information 96

Clear Summary Data -- 95 -- erases all types of summary data. This includes summary data for the Profit and Night Audit Summary Reports.

When would you use one of these functions? Let's say you clear activity data monthly using a regular memory management decision. If you want to save summary data until the end of the quarter, you can use selection code 95, delete the summary data, and begin a new report period.

Section 12/Other Functions and Features

To clear memory,

You...

The PL...

1 Press  .

2 Enter the selection code  
-- 94, 95, or 96.

3 Press  .

4 The buzzer sounds,



flashes.

If you change your mind,

Press  .

The system returns to its  
idle state.

5 To continue, press .

6  continues to

flash.

You can still change your mind,

Press  .

The system returns to its idle  
state.

7 Press  .

System Initialization 99

Follow the procedure below to reset the system. When you reset, the PL does the following:

- Prints the initialization statement
- Sets top of form
- Reads the software module

You do not have to reset the system each time you remove and replace the software module. The PL does this automatically. Each time you push the rate module lever to the right and release it, the PL reads the software module's programming.

The PL retains all system memory -- call records and database programming -- when you reset.

To reset the system,

You...

The PL...

1 Press  .

2 Enter the selection code 99.

3 Press  .

4 The PL:

- initializes
- sets top of form
- reads the software module
- returns to its idle state



---

System Tests 90, 91, 92, 93

You perform system tests in much the same way you select a report: enter a selection code and press ENTER. Run through the five system tests at installation and in the event of a problem. Before you do any testing though, check the initialization statement. It lists the following:

- Software version
- Memory capability
- Projected call record capacity
- Maximum stations, trunks
- Software application
- Telephone datastream
- Your area code
- Your exchange
- Your telephone system

Verify that this information is correct. The PL will not function without the correct software module.

The system tests available with the PL allow you to make sure:

- The PL is receiving data.
- The data is valid.
- System memory operates properly.
- The front panel is functional.
- The printer is operational.

Here's a list of the system tests and selection codes. You can run these tests following the basic procedures for selecting reports. See the PL Installation Manual for complete instructions.

- Data In/Valid Call Test 90
- Memory Test 91
- Front Panel Test 92
- Printer Test 93

---

Data In/Valid Call Test 90

To run the Data In/Valid Call Test, enter selection code 90. Make three to five test calls. Each test call should be at least one minute long.

As the phone system transmits data to the PL, you will see a d on the left side of the data window and a c on the right side.

d means the PL receives the call record.

c means the call record format is acceptable and the call record is stored.

However, you may see rc displayed in the data window.

rc means the call record is acceptable but not stored because of some value(s) you programmed in the Valid Call Timing, Incoming Call Filter, and/or Local Call Filter Databases, or the software module is not compatible with your telephone system. Call Customer Service if you have verified your calls are not being rejected because of your programming.

---

Memory Test 91

To run the Memory Test, enter selection code 91. The front panel becomes inactive, with the exception of the CANCEL key, for the duration of the test. Cancel this test by pressing CANCEL, then CONFIRM.

Look at the stage and data windows. The stage window displays the number of the memory bank being checked in the stage window. The data window displays the number of each location as it is checked. The PL sends this message to the printer when the test is passed: "Memory Test Passed." If there is a problem, look at the printer. The PL transmits the exact location of the memory failure to the printer. If the memory test fails, contact Customer Service.

### Memory Alarm

The PL has an automatic memory alarm to safeguard against the loss of data. An alarm sounds at 95% of capacity. The alarm sounds briefly every three seconds until you disable it. To disable the alarm:

1. Press CANCEL.
2. Press CANCEL again.

The alarm only sounds when the PL is in its idle state. This is, you will not hear the alarm if the PL reaches 95% of capacity while you are programming or running the Data In/Valid Call Test, or the PL is printing reports or dequeuing data. The memory alarm is not active during a power failure.

Guard against memory loss by programming the Memory Full Database (73). See page 11.41. If you do not program the Memory Full Database and allow the PL to collect calls until the memory alarm sounds, you run the risk of losing call records when programming, printing, testing and dequeuing are in progress.

Remember, the value shown in the data window while the PL is idle represents the percent of memory full.

---

### Front Panel Test 92

To run the Front Panel Test, enter the selection code 92. All of the function keys flash and the buzzers sounds briefly.

Begin testing by pressing each key in turn. Press the CANCEL key last. This tests the key and cancels the test in one step. Press CONFIRM to return to the idle state.

---

### Printer Test 93

To run the Printer Test, enter the selection code 93. PRINT/PAUSE lights immediately after you press ENTER. The printer prints each keyboard character and continues to do so until you press CANCEL and CONFIRM. The printer test does not stop immediately after you do this, but runs until the printer buffer is empty.

## Section 12/Other Functions and Features

### Description

---

Microprocessor-Controlled  
Stand-alone Telephone Accounting System  
Fully Modular Software

#### Inputs

SMDR Serial Port  
HOBIC Merge Interface  
External Terminal

#### Outputs

Parallel Printer Port  
Serial Port: Printer,  
PMS Interface, HOBIC Merge  
RJ11C  
External Terminal Interface  
Optional Expansion Serial Port

#### Battery

4 Hour Call Record Hold-up

#### Memory

128K to 2 Megabytes DRAM  
8K to 64K CMOS RAM

#### Battery

4 Hour Call Record Hold-up Time; Expandable  
30 Day Database and Summary Information Hold-up Time  
Call Rating Information in Non-volatile Memory

#### Connectors

External Battery Connector  
External Alarm Connector

#### Environment

60F to 100F  
20% to 80% Relative Humidity

#### Power

110/220 VAC  
60/50 Hz

#### Dimensions

Height: 5 in.  
Width: 16 in.  
Depth: 18 in.  
Weight: 17 lb.

## Selection Code Listing

### Activity Report

- 19 Station Activity by Organization
- 20 Station Activity Report

### Summary Reports

- 30 Station Summary Report
- 32 Network Summary Report
- 33 Department Summary Report
- 35 Company Summary Report
- 36 Trunk/Line Utilization Report
- 37 Area Code Summary Report

### Exception Reports

- 41 25 Most Frequently Called Numbers
- 42 25 Longest Calls
- 44 25 Most Expensive Calls

### Database Directories

- 46 Station Database Directory
- 47 Trunk & Equal Access Database Dir.
- 48 Miscellaneous Database Directory

### Lodging Reports

- 50 Guest Check-Out Report
- 51 Night Audit Summary Report
- 52 Night Audit Activity Report
- 53 Profit Report
- 54 PMS Interface
- 55 Call Record Deletion

### Miscellaneous

- 49 Selection Code Editor
- 57 Administrative Activity Dump
- 58 Guest Activity Dump
- 59 Selection Code Listing

### Database Programming

- 60 Set Date Database
- 61 Set Time Database
- 62 Printer Parameters Database
- 63 SMDR Parameters Database
- 65 Trunk Database
- 66 Equal Access Database
- 67 Dial-Up OCC Database
- 68 Station Database
- 69 Valid Call Timing Database
- 70 Local Call Parameters
- 71 Incoming Call Parameters
- 72 Echo All Calls Database
- 73 Memory Full Database
- 74 Auto Print Database
- 80 Lodging Surcharges Database
- 81 Operator Assisted Surcharges
- 82 Directory Assistance Surcharges
- 83 Taxes Database
- 84 PMS Interface Parameters
- 86 HOBIC Merge Transmission Param.
- 87 HOBIC Merge Data Format Database
- 88 Wake-Up Messages Database

### Tests and Diagnostics

- 90 Data In/Valid Call Test
- 91 Memory Test
- 92 Front Panel Test
- 93 Printer Test
- 98 Load Dummy Data
- 99 Initialize/Reset

### Clear Memory Functions

- 94 Clear Activity Memory
- 95 Clear Summary Memory
- 96 Clear Database Programming

