INN-FORM PC 1.1

User's Guide

Build 09016

July, 2002

Introduction

The complete INN-FORM PC ("IFPC") system is a multi-module hospitality call accounting system that runs on any Microsoft Windows 95 / 98 / NT / 2000 system. IFPC is not intended for any other operating system, including Windows 3.1 and earlier.

IFPC consists of several modules, each with various programs (both EXEs and DLLs), as follows:

IFPC CP.EXE
IFPC PM.EXE
IFPC FD.EXE
SHAREIT.DLL
BORLNDMM.DLL
SYSTEMINIT.EXE
CAR.ROM
REGISTER.EXE
JTSYSTEM.INI

These modules and programs will be discussed in more detail later in this document.

Since IFPC is a modular application, it is designed so that all current modules are installed. Any modules required to create a complete call accounting system for an end user are activated by the registration code that is given to the end user by TEL. Please note that not all modules are required by all end users. Their needs will dictate which modules are used and which ones are left dormant.

Note that other modules will be created in the future and will be documented as they are released.

Installation

Installation is very straightforward. The end user places the Install diskette (it is anticipated that later releases will be on CD-ROM) into the diskette drive and executes the file called Setup.exe. This can be accomplished by using the Windows Explorer or by using the Start/Run command with a parameter of A:\Setup.

A typical Windows set up program will begin. The user simply answers any on screen prompts and IFPC will be installed. The initial set up screen is shown below.

Location of Files

After the installation the various files, their respective locations and purposes are as follows:

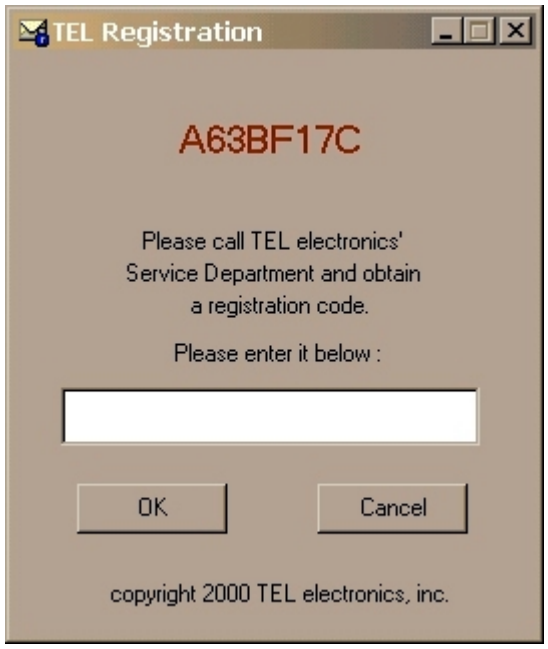
File Name	Location	Purpose
IFPC CP.EXE	Application Directory	Handles all call processing, costing, charging, and associated tasks
IFPC PM.EXE	Application Directory	Receives costed call information from the CP module and sends it out to the Property Management system
IFPC FD.EXE	Application Directory	Stores processed calls and allows various reports.
SHAREIT.DLL	Windows Directory	Provides means for communication between the various modules
BORLNDMM.DLL	Windows Directory	Memory Manager
SYSTEMINIT.EXE	Windows Directory	IFPC initialization program; makes registry entries and creates CALLREC.DAT files from the ROM File
CAR.ROM	Application Directory	Factory created customization data file
REGISTER.EXE	Application Directory	Registration program to allow the various modules to run on a specific PC until a specified date
JTSYSYEM.INI	Windows Directory	INI file showing path to the Application Directory after install

Additional files will / may be created by IFPC. Currently, the default location for these additional files is in the application directory.

Registration

Before you can use any of the IFPC programs you must register the software. To do this, simply go to the application directory (the directory where you installed the IFPC files) and double click on the program called REGISTER.EXE (the icon is a lock over an envelope).

The following window will appear:



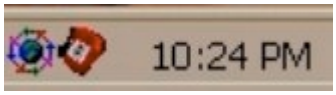
When REGISTER starts it will display a window that has a red number at the top. This number is the ID of your PC that TEL needs in order to give you the registration code. Now, call TEL's Customer Service and tell them that you want to register your IFPC. The tech will then ask for your PC ID number – be sure to read it to him exactly as it appears on the screen. Have the tech read it back to you in order to ensure that he or she heard you correctly. The tech will then give you a lengthy number, which is your registration code. Enter this code in the space provided and click OK. If the number was typed in correctly it will show a message box thanking you for registering your IFPC. The program will then terminate. If the number was incorrect, it will show a message telling you that the number was invalid and return you to the registration screen.

Even though all the current IFPC modules are installed on your machine, they will not run if you did not purchase that particular module. The registration code determines which modules are activated. The exciting part of this technology is that if you later decide to purchase additional modules, you only need to call TEL, pay for the module and then receive a new registration code. This new code will now activate the module just purchased. No waiting for shipping!

Starting IFPC CP 

Go to the application directory and double click on the IFPC CP icon (the red phone). This will begin IFPC CP. You will see the splash screen and then the main screen.

The splash screen will identify the module, the version number, the build number, and any other important information concerning this particular release. In the System Tray you will see a smaller version of the CP icon (the red phone) as shown below.



Double clicking this System Tray icon will redisplay the main screen. Right clicking this icon will pop up a menu that allows the user to customize and control CP. The user will typically want to keep the program minimized to the System Tray so that they can work with other programs. However, CP is working whether it is maximized or minimized.

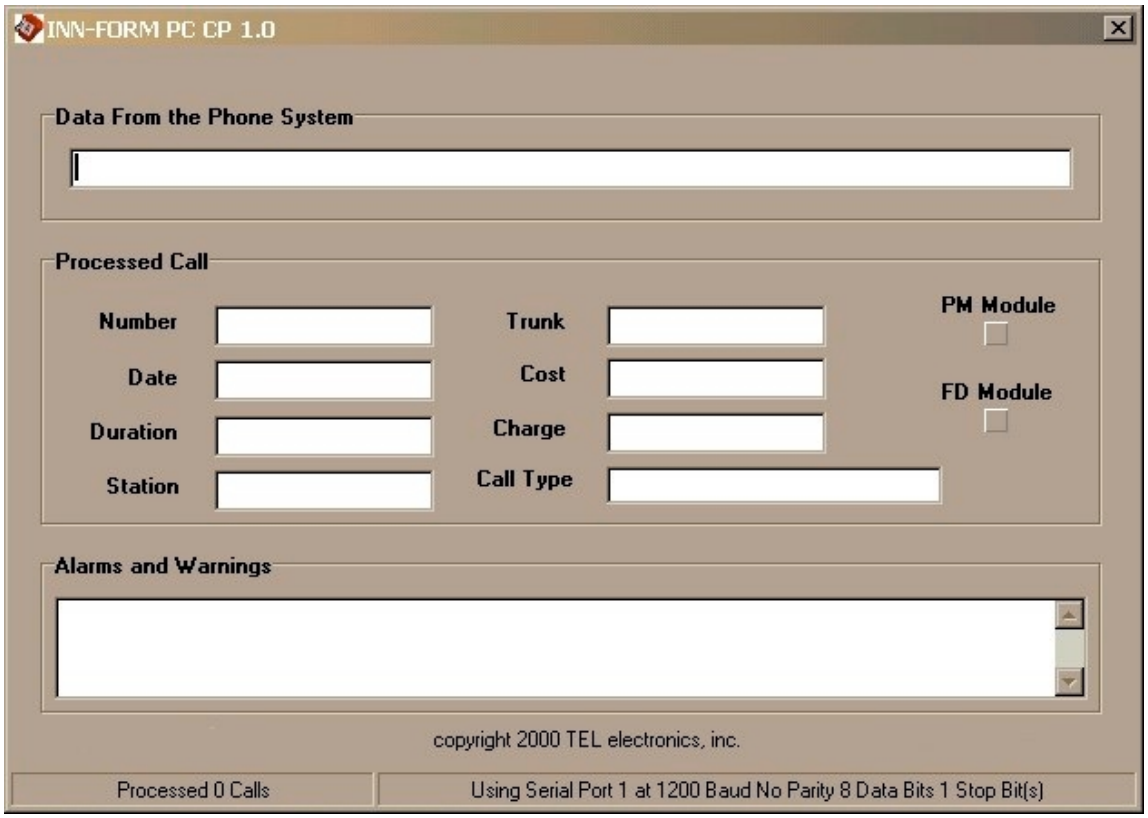
CP Main Screen

There is no menu, nor do you see the typical icons in the upper right corner of the window. All that is there, is the X typically used to close the current window. Note that clicking the X will not cause CP to terminate as with other Windows programs, but it will minimize itself to the System Tray bar (usually found in the lower right of the desktop next to the time).

The main screen is organized into several different sections. The top most section, titled Data From The Phone System, shows the current (last) "raw" SMDR received. The next section is the Processed Call section. This section shows the results of CP's parsing and computations concerning the SMDR. It also contains two "LEDs" that show if any other IFPC modules are running (note that this doesn't mean simply installed, but actually running at the moment). The LEDs turn green when the specified module is running. Note that CP will not attempt to send processed call records to the other modules if none of the other modules are running..

The next section is the Alarms and Warnings section. This is a scrollable box that maintains any information that the user may need to review. While all alarms have their own window and alerting sound, they are also shown in the Alarms and Warnings section. This section may also contain information about the operation of the system that may not warrant an alarm.

The very bottom of the Main Screen holds the Status bar. This bar is divided into two parts. The left most part contains a count of all call records processed since CP was started and / or the user reset the count. This number also appears if the user places the Windows pointer (cursor) over CP's System Tray icon and waits a second or two. This can be useful if the user wishes to verify that CP is still processing calls, without having to restore the Main Screen. The right most part of the Status Bar contains all the current serial port settings for the port which is receiving the SMDR information from the phone system.

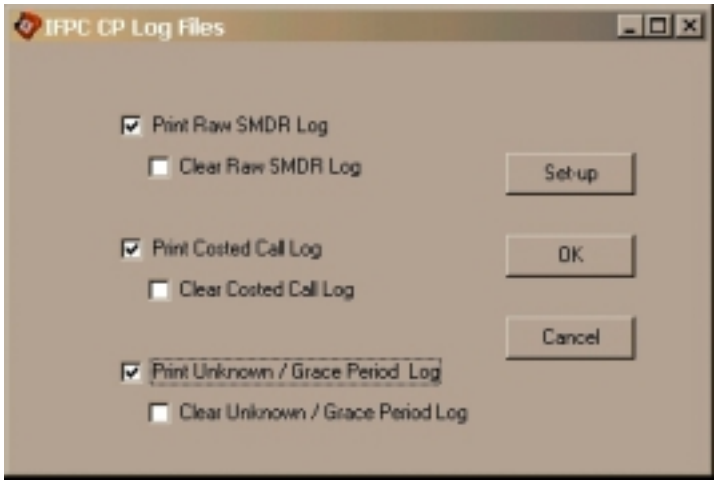


CP Popup Menu

As mentioned, when the right mouse button is clicked when the Windows pointer is over the CP System Tray icon, a menu will popup. This menu contains various options for modifying the operation of CP, including terminating the program.

Restore Window: Restores the Main Screen; an alternative to double clicking the System Tray icon.

Print Logs: Opens a window that allows the user to print and optionally clear any or all logs that the user may have the system keep. The Print Logs screen is shown below.



Clear Counters: This option clears the processed calls counter as well as several internal counters used by CP. The user shouldn't need to clear these counters, but it may be of benefit for those users who want a simple way of tracking traffic for a specific time period. It also may be used if the number becomes so large that it is meaningless to the user.

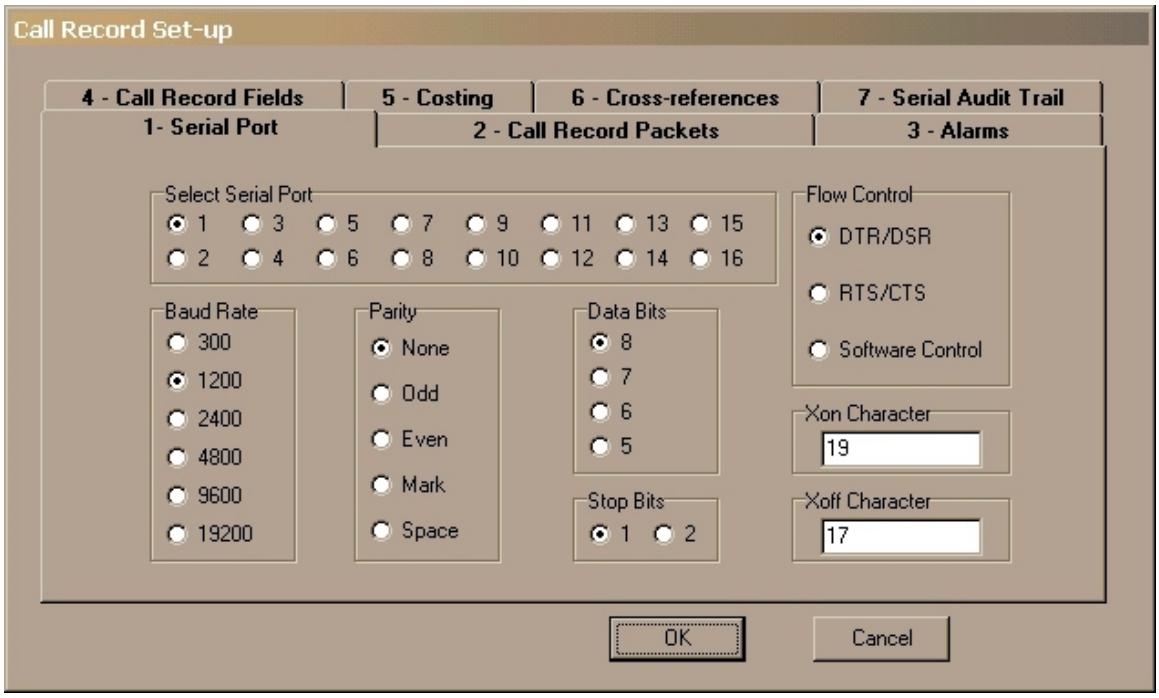
Call Record Setup: This option brings up the setup screen (see next section for more information about the setup screen).

Set Factory Defaults: Returns the settings of CP to those sent by the factory (TEL).
About: Simply shows the splash screen, which contains all the release information (as shown below), but with an OK button so that the user has control of the screen.

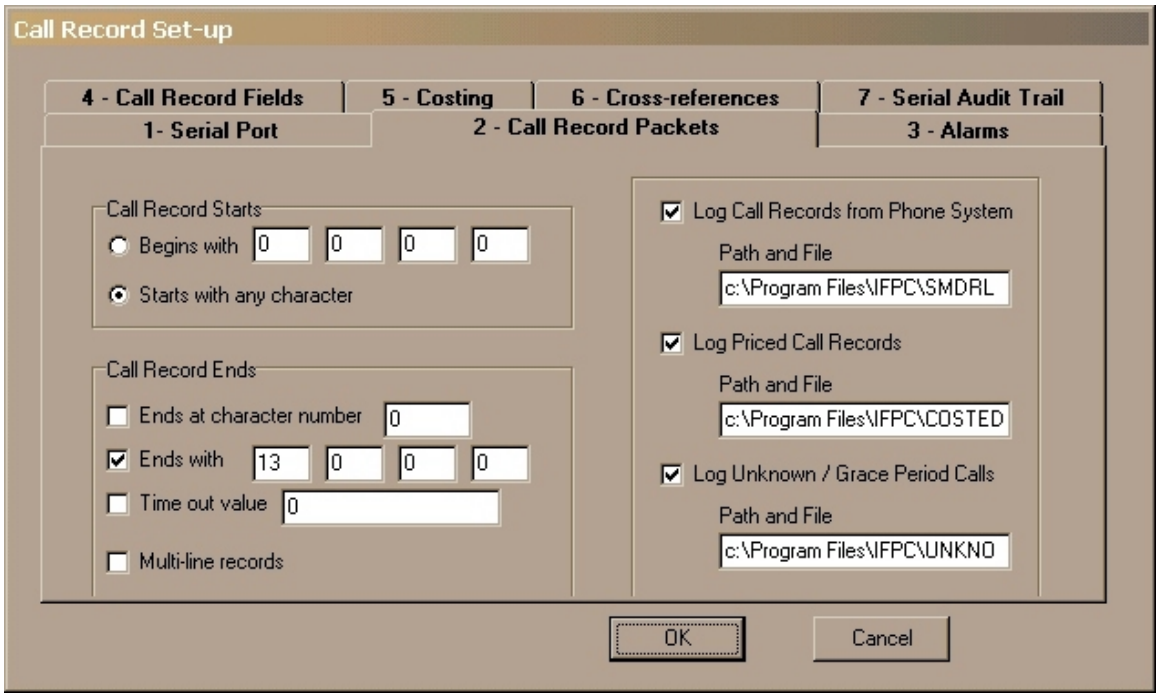
Quit Inn-Form PC: Terminates the operation of CP and removes it from the System Tray. A confirmation box is displayed asking for confirmation that the user really wishes to stop CP execution. Once stopped, calls are not being processed and the user will have to restart CP to begin processing calls again. If the CP icon is not in the system tray, CP is not running.

Call Record Setup

This screen is used to alter the behavior of the CP module and to a lesser degree certain functions of the other modules. In an effort to make this process compact and concise, this screen has six sub-screens called tabs. The user selects the tab which contains the parameters he / she wishes to alter and the appropriate sub-screen will be displayed.



Tab 1: Serial Port. This tab contains all the information needed to setup the serial port for receiving information from the phone system. The user clicks on the appropriate radio button in each group (called radio buttons because when one is selected the others in the group are deselected – like a car radio). Groups which may be set, include the serial port number, the Baud Rate, Data bit size, Stop bits, Parity, and Flow Control. If Software flow control is selected the user may also alter the ASCII code for the XON and XOFF bytes (these bytes are set to the industry standard defaults for XON and XOFF and should only be changed in unique situations).



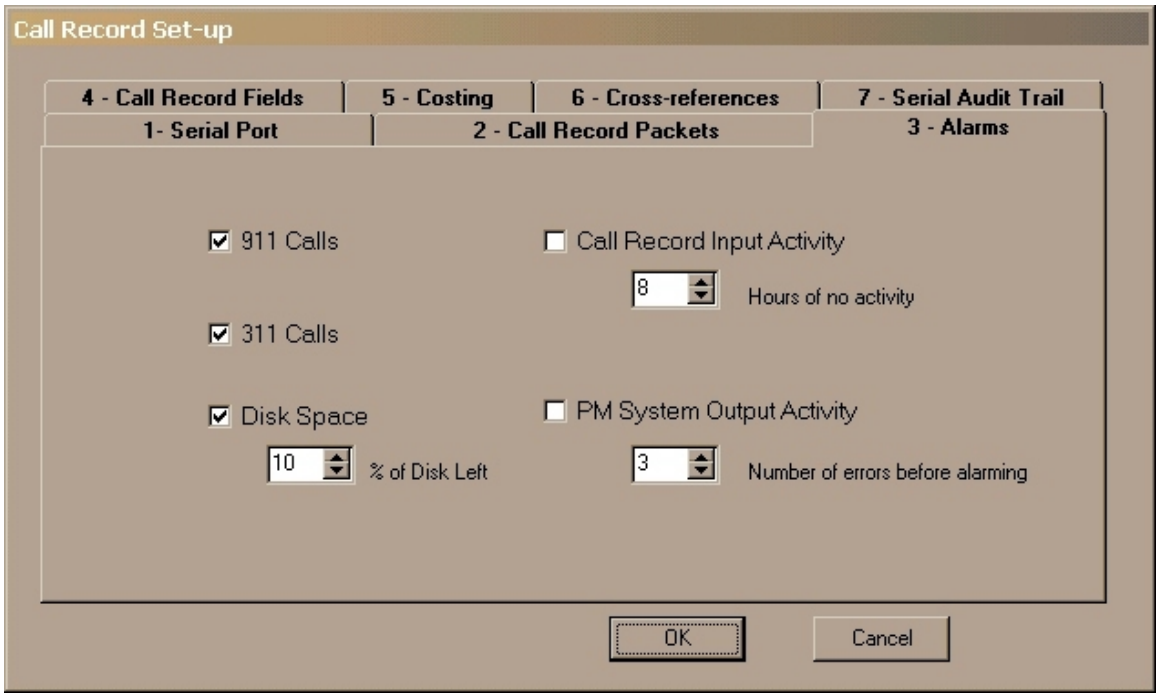
Tab 2: Call Record Packets. This tab allows you to set up all the information needed for CP to understand when a legitimate call record from the phone system is received. It allows you to specify if SMDR and costed call records should be stored to their respective log files. The top left section allows you to determine what the SMDR record should start with. Some phone systems have elaborate start of text characters or information; if yours does you can set it up here. You may define a string of up to four characters. Enter these characters as ASCII decimal; e.g. a carriage return would be 13. The default is to see any character as the start of text.

The bottom left section allows you to determine the conditions under which CP knows when the end of the SMDR record has been reached. The first option is for those records that have a set length. The second option allows you to set a string of up to four characters to signify the end of text. Again these are entered as ASCII decimals. The third option allows you to define a timeout period that triggers the assumption that we have reached the end of the record. Notice that you can have a mix of these options, for example, you can have both a specific character and a timeout value if desired. The last option tells CP that the SMDR is sent in two lines and to concatenate the records to form a single record before processing.

The right section allows you to tell CP to log any of the following: the SMDR call records as received from the phone system, the costed call records, or the call records of the Unknown and Under Grace Period calls. If you wish to log this type of information, you may specify a file name (complete with path) for CP to store this information or you may let CP use the default file names for log storage. Hint: if you would rather have your own software or system (like your accounting system) handle reporting and storage of the costed call records, you can turn on costed call record log and import this information into your software. The storage of this information is in a fixed field length format (see below). You may also print and clear these log files from within CP by using the Print Logs menu option.

Fixed Field Definition in Costed Log File

Position	Length	Field Name	Format	Comments
1	5	Date of Call	MM/DD	
7	5	Time of Call	HH:MM	
13	4	Trunk	XXXX	
18	5	Extension	XXXXX	
24	4	Duration	XXXX	
29	12	Number Called	XXX-XXX-XXXX	
42	7	Cost	$XXX.XX	(includes Cost and any Tax)
50	7	Charge	$XXX.XX	(includes Charge and any Tax)
58	1	Type of Call Indicator	A	
60	19	Type of Call	AAAAAAAAAAAAAAAAAAA	



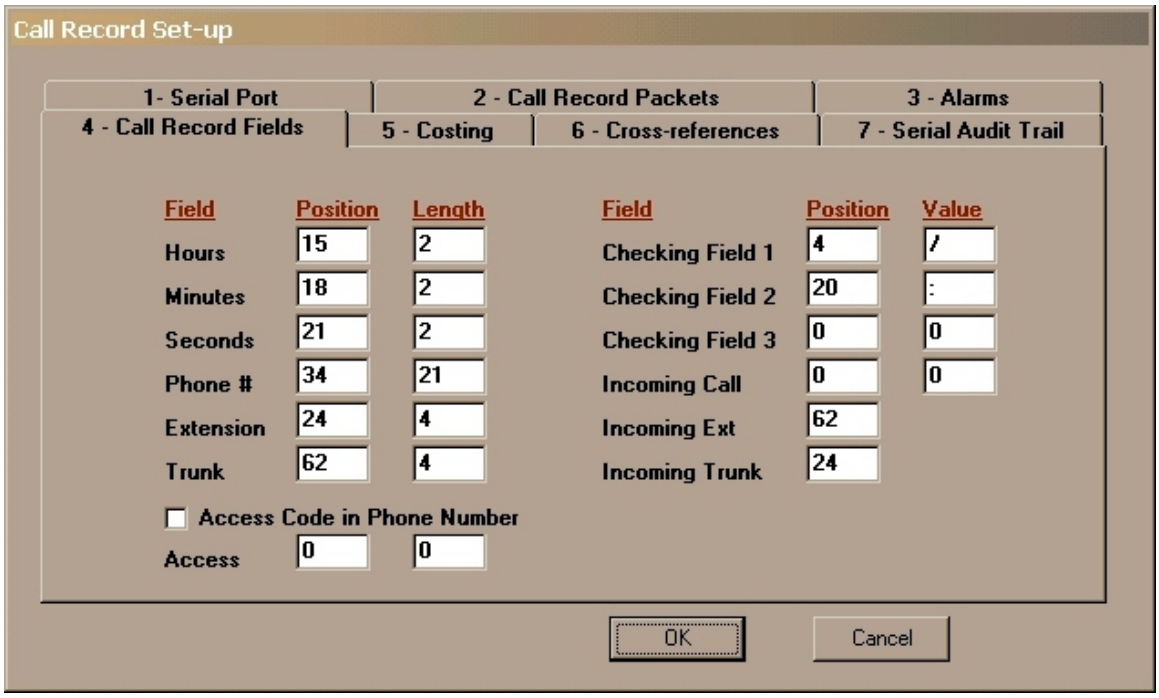
Tab 3: Alarms. The alarm tab allows you to set which alarms CP (and some other modules) will sound if the parameters you input are exceeded. All alarms create a sound and pop up a window that explains what the alarm is about. You cannot use the computer until you press the OK button on the alarm page signifying that you have read and responded to the situation. The alarm information is also posted in the Alarm and Warnings section on the Main Screen.

The 911 and 311 alarms scan the incoming SMDR records and will sound an alarm if such emergency calls were placed. The alarm window will tell you which extension (room) placed the call and at what time. Remember that the phone system must send the information to the IFPC before CP can trigger the alarm. This usually means that the caller must hang up the phone before the phone system will send IFPC the record. So no alarm can be triggered when a user dials 911 or 311 and does not hang up the phone afterwards. TEL electronics, inc. provides other systems, such as the INN-SURE, which can analyze dialed numbers as they are dialed, thus allowing an alarm to be triggered immediately after emergency calls are dialed. Both the 911 and 311 alarms are enabled by default.

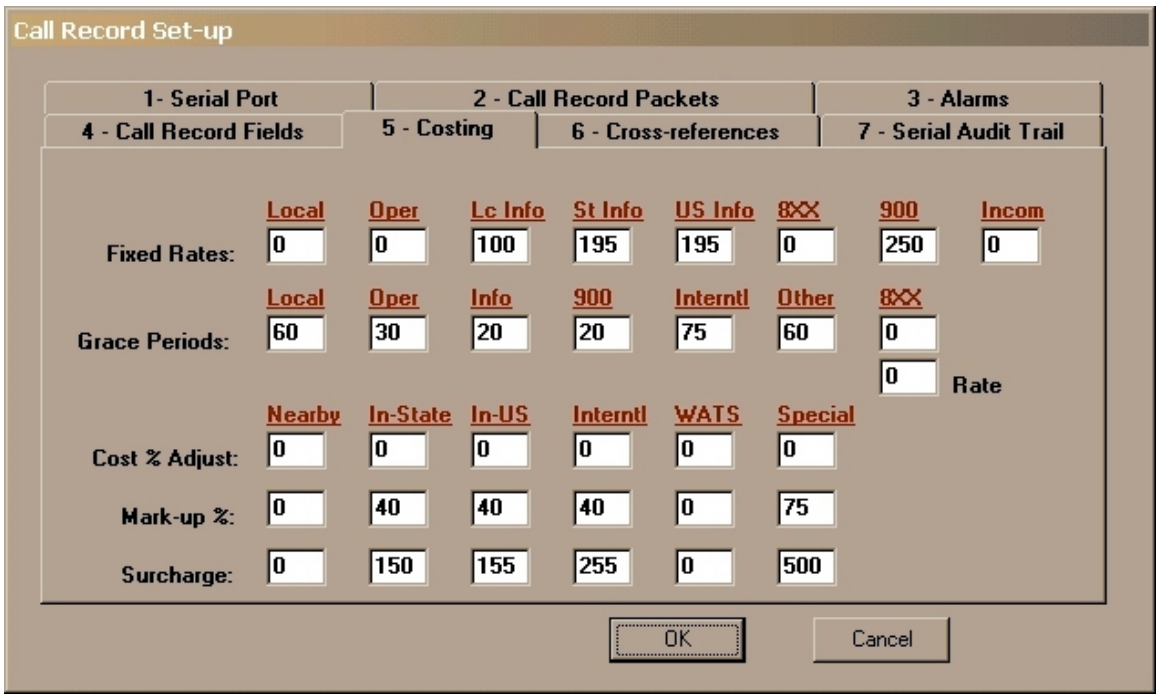
The Disk Space alarm signals if the hard disk space left on the PC running IFPC is below a certain percentage that you can set. The default is ON with a level of 10%.

Call Record Input Activity alarm is triggered if there has been no received SMDR for the number of hours indicated. The default for this alarm is OFF.

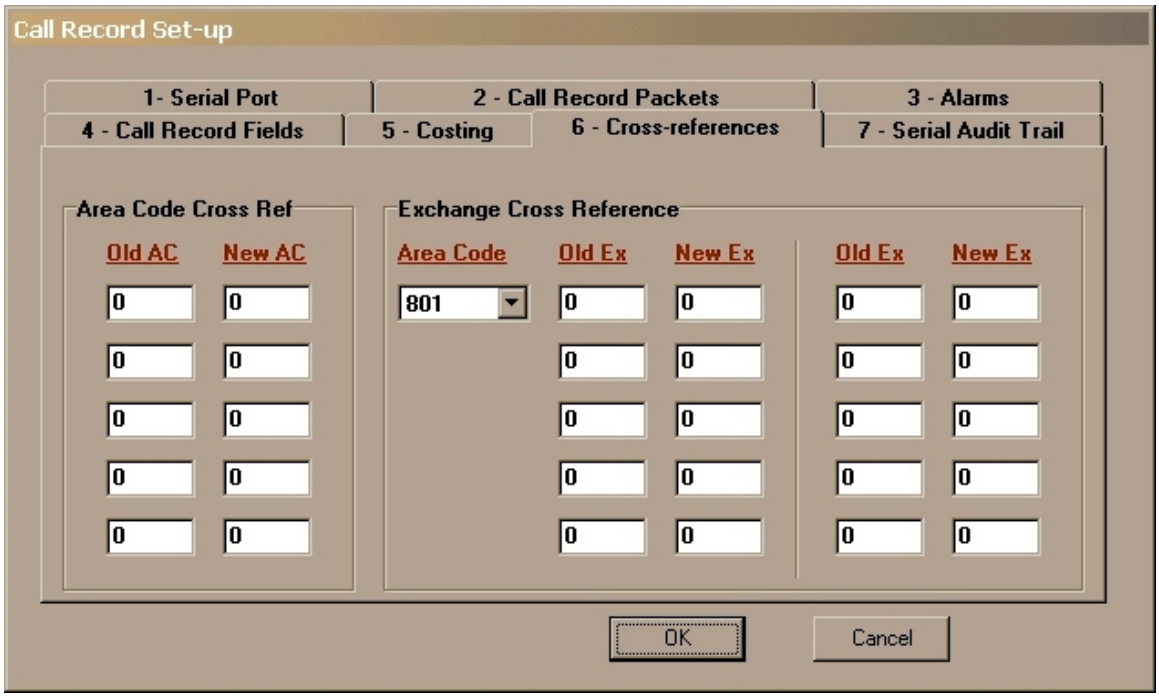
The PM System Output Activity alarm goes off if the PM module receives a set number of errors while trying to send records to the Property Management system. You set the allowable number of errors. The default is OFF.



Tab 4: Call Record Fields. This tab allows you to change the field lengths, positions and specific characters of the call records from the phone system, enabling CP to know where in the call record it can obtain needed information. The default is provided for you by the factory and is set to the switch (PBX) type you indicated in your order. However, you may make changes to that information here if needed. Be very careful when making any changes as they may cause CP to stop functioning properly.



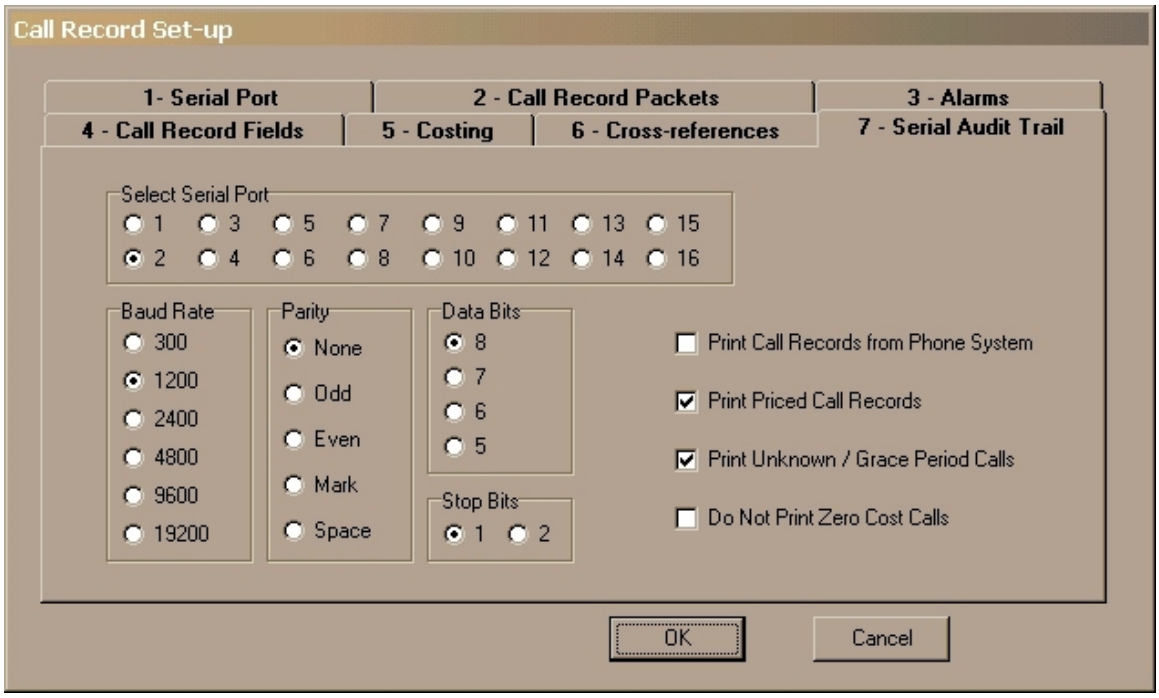
Tab 5: Costing. Use this tab if you would like to make limited changes to the way CP costs and charges calls. Again, the factory has pre-configured this information based on your order, but CP allows you to change it if needed. For further information concerning how IFPC CP costs and charges calls, and how the above parameters affect CP's costing and / or charging please refer to the Costing and Charging section on page 16.



Tab 6: Cross-references. This tab allows the user to add or change cross-references for both Area Codes and Exchanges within the detailed Area Codes. Detailed Area Codes are those Area Codes that include detailed rate information for every exchange in that Area Code. Each IFPC system contains data for the twenty closest Area Codes to the property. Outside of these Area codes the system contains rate information based on wire centers for each Area Code. This strategy allows for a high degree of costing accuracy, while limiting the amount of rate data that must be installed and maintained by IFPC.

The left portion of the screen shows the Area Code Cross Reference box. To use this feature just input the Area Code that is current (i.e. that there are tariff rates for) in one of the Old boxes. Then put the Area Code that you would like to price the same as the old one in the New box across from the Old box you just filled in. You can add up to five Area Code cross-references.

On the right side of the screen is the Exchange Cross Reference box. You can have up to 200 exchange cross-references (with 10 per detailed area code). To add or change exchange cross-references, you must first select which detailed area code to apply the cross-references to. You do this by clicking in the Area Code selection box. A drop down menu will appear that will list all the detailed area codes this properties rate table contains. Select the appropriate area code. After you select the appropriate area code, the twenty edit boxes to the right will fill in with the current cross references. To add a cross-reference go to the first edit box that contains a zero. Enter the Old exchange in the Old box (this would be an exchange that currently has rates associated with it in the rate table). In the New box across from the Old box, enter the New exchange that you wish to have priced as if it was the old exchange. You may enter up to ten cross-references per detailed Area Code.



Tab 7: Serial Audit Trail. The Serial Audit Trail tab allows you to set up a serial port for printing various call record information to a serial printer as those records are processed (a form of audit trail). Simply select the port, baud rate, data bit size, parity, and stop bits. Then select which kinds of call records you wish to print (call records from the phone system, all costed call records as processed by CP, and / or Unknown / Under Grace Period calls). Note that CP does not open the indicated port unless at least one of these is selected. Also note that this printer must be dedicated only for printing these call records and cannot be used for printing IFPC reports or as a general printer for any other Windows application.

Finished Set Up

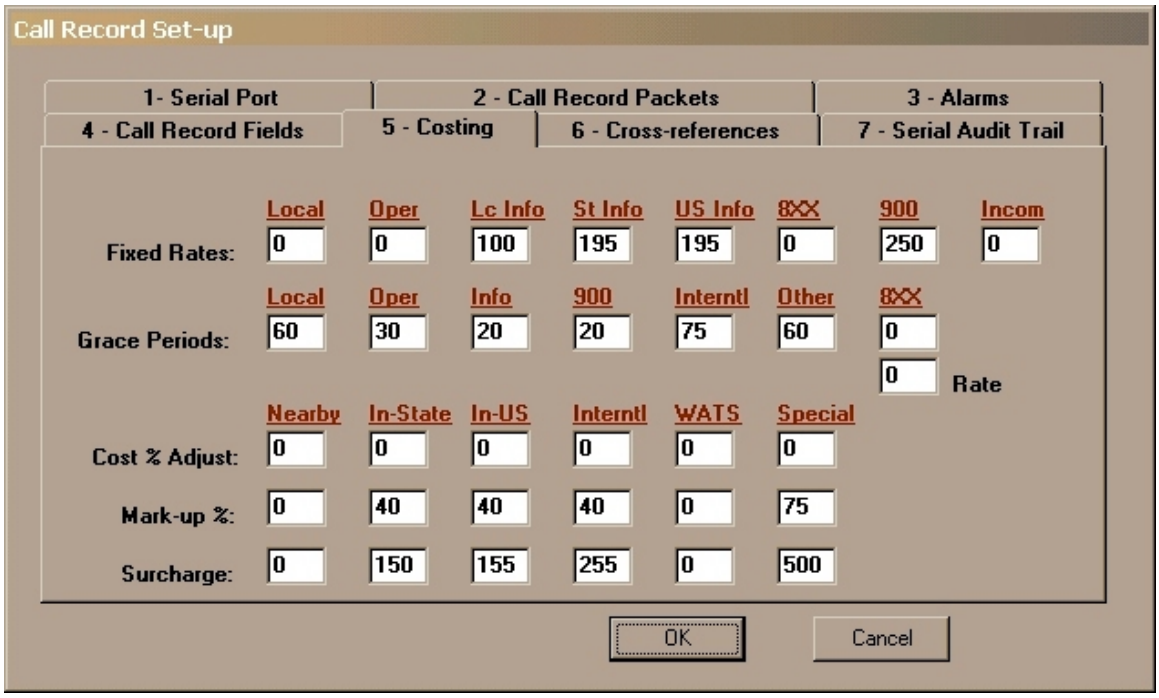
Once you have made all the changes desired press OK and the settings are activated immediately. If you change your mind and don't want to make the changes then you can press CANCEL and the changes are disregarded.

IFPC CP Costing and Charging

In this documentation, "cost" refers to the pricing of a telephone call as billed by the telephone company and "charge" refers to the final dollar amount that a guest is billed for a telephone call. Telephone company costs are based upon tariffs, which in turn are generally based upon distance and duration of calls. Some exceptions exist, to include fixed rate calls (local, operator-assisted, information, etc.) and metered call, such as WATS calls. IFPC CP can determine costs based upon all government approved methods when proper information is provided and included in the factory configuration of each system or is programmed on site by the user.

IFPC CP calculates both the cost and charge for every call. The system analyzes the number dialed and the duration of the call in order to calculate basic cost. It then determines if any cost percentage adjustments are necessary, and if so, applies this adjustment. It then adds any appropriate taxes. This results in the total cost of the call. IFPC CP then adds a mark-up percentage and a surcharge, if any are specified for the specific call type of the call, and then adds applicable sales tax to compute the final charge.

The Tab 5: Costing screen (as seen here) shows those parameters that are alterable by the user, which IFPC CP is using to calculate costs and charges.



Fixed Rates: These are fixed costs per call that you can place for certain call types. These call types are shown in maroon across the width of the screen. Thus, for Fixed Rates you can specify fixed rates for Local, Operator Assisted, Local Information, State Information, US Information, 8XX, 900, or Incoming calls.

All values are shown / entered as cents. In the screen above, it shows that the fixed rate for Local calls is zero cents while the fixed rate for a 900 call is $2.50.

Grace Periods: A grace period is the amount of time allowed to pass before a call is defined as a completed call. Regardless of whether a call actually is answered, there will not be a charge for that call if the call duration is less than the grace period established for that call type. On the other hand, if the caller allows the phone to ring for a time longer than the grace period, IFPC will declare the call completed and a charge will be determined. Please note that TEL electronics manufactures a product, the INN-SURE, that can eliminate the need for grace periods by reporting when each call is actually completed. Grace periods can be set for all the call types shown. All values are entered as seconds. The screen above shows a grace period of 60 seconds for local calls, but 75 seconds for international calls.

The Grace Period setting for 8XX calls is in minutes (not seconds) and may implement a special costing feature called Threshold Costing. This feature allows you to define a per minute rate to be charged for 8XX calls once the grace period has been exceeded. This per minute cost is in addition to the cost established by the Flat Rate parameter for 8XX calls. This feature is activated by setting a value (as cents) in the rate box.

Cost Percentage Adjustments: The purpose of this option is to allow you to adjust call costing based on a percentage value. This is helpful for keeping up with minor tariff changes from the phone company. Although this feature is provided, in order for IFPC to remain accurate, it is strongly recommended that the user purchase rate updates on a periodic basis. All values are entered as a percentage value and may include a minus sign (negative percentage) to adjust the cost of a call down.

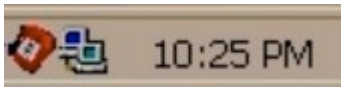
Mark Up Percentage: These values are used by IFPC CP to calculate the charge of a call. Thus, a mark up percent is set by the user in order to recover overhead costs, labor costs, and / or to provide a profit from use of the phone. This option should not be used to adjust the cost of the call due to changes in phone company tariffs. All values are entered as a percent and may include a minus sign (negative percentage). In the screen above, In-State calls are marked up 40%. Thus, an in-state call costing $1.00 will be charged $1.40 (assuming that other charging parameters are not considered).

Surcharges: A surcharge is a flat fee added to a call charge after all other costs and charges have been computed. These values are entered as cents. Using the screen above, In-State calls have a $1.50 surcharge, meaning that an in-state call costing $1.00 will be charged $2.50 (assuming that other charging parameters are not considered). If we were to include the Mark Up Percentage for In-State calls, this $1.00 call would be charged $2.90 (40% mark up plus a $1.50 surcharge).

Starting IFPC PM 

Go to the application directory and double click on the IFPC PM icon (two computers joined together). This will begin IFPC PM. You will see the splash screen and then the main screen.

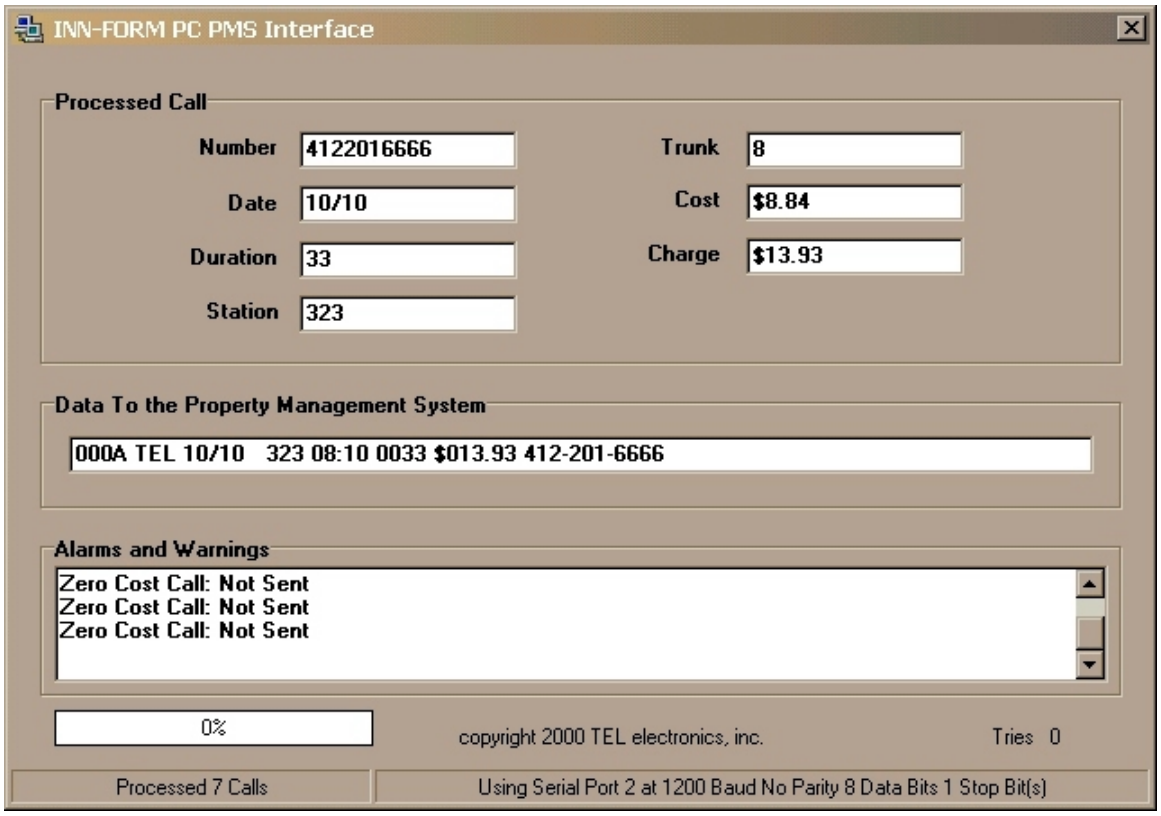
There is no menu, nor do you see the typical icons in the upper right corner of the window. Note that clicking the X in the upper right hand corner will not cause PM to terminate as with other Windows programs, but it will minimize itself to the System Tray (usually found in the lower right of the desktop next to the time), as shown below.



In the System Tray you will see a smaller version of the PM icon (two computers joined together). Double clicking this icon in the System Tray will redisplay the main screen. Right clicking this icon will pop up a menu that allows the user to customize and control PM. The user will typically want to keep the program minimized to the System Tray so that they can work with other programs. However, PM is working whether it is maximized or minimized.

PM Main Screen

The main screen is organized into several different sections. The top most section is the Processed Call section. If shows the information passed to it by the CP module. The next section, entitled Data To The Property Management System, shows the current (last) call record sent to the PMS. This call is shown as it is formatted based on the type of PMS you have.



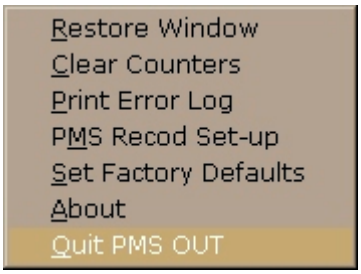
The next section is the Alarms and Warnings section. This is a scrollable box that maintains a log of alarm, warning or operational information that the user may wish to review on a periodic basis. While all alarms have their own window and alerting sound, they are also posted in the Alarms and Warnings section for later review. This section may also contain information about the operation of the system, which may not warrant an alarm.

Below the Alarms and Warnings section and to the left of the copyright is a progress bar, which shows the percentage of the output buffer that is filled. Since the speed of output depends on the PMS responding to the PM system, a buffer is used. This bar will show the user how much of that buffer is taken. As long as it remains below 50% the bar is green. Between 50 and 75% the bar is yellow and over 75% the bar is red. To the right of the copyright is a counter, which reflects the number of times that the PM module has attempted to send the current record to the PMS. If it cannot send the call record successfully, it will log the information in the Alarms and Warnings section as well as notify the CP module that an error has occurred. It then logs this call into the PMSERROR.LOG in the same format the PMS was expecting it in. The number of attempts prior to logging the call is determined by the respective property management interfaces (see sections below on the Micros, Hobic and Holidex interfaces), but usually range between three and five tries.

The very bottom of the Main Screen displays the Status bar. This bar is divided into two parts. The left most part contains a count of all call records processed since PM was started and / or the user reset count. This number also appears if the user places the Windows pointer (cursor) over PM's System Tray icon and waits a second or two. This can be useful if the user wishes to verify that PM is still processing calls, without having to restore the Main Screen. The right most part of the Status Bar contains all the current serial port settings for the port that is sending the formatted call information to the property management system.

PM Popup Menu

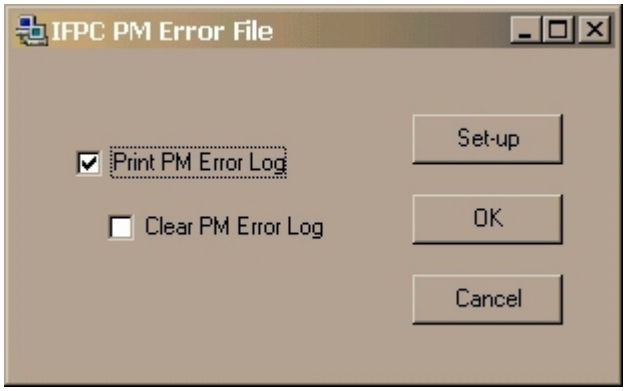
As mentioned, when the right mouse button is clicked when the Windows pointer is over the PM System Tray icon, a menu will popup. This menu contains various options for modifying the operation of PM, including terminating the program.



Restore Window: Restores the Main Screen; an alternative to double clicking the System Tray icon.

Clear Counters: Clears the processed calls counter as well as several internal counters used by PM. The user shouldn't need to clear these counters, but it may be of benefit for those users who want a simple way of tracking traffic for a specific time period. It also may be used if the number becomes so large that it is meaningless to the user.

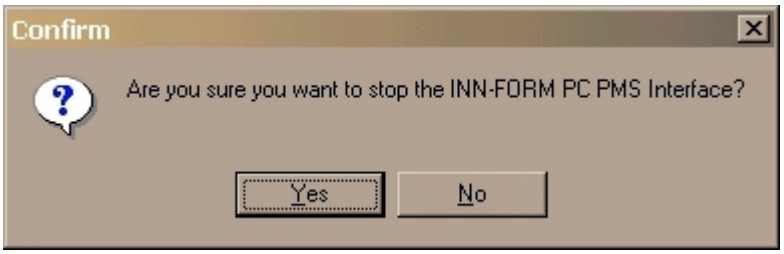
Print Error Log: Allows you to print and optionally clear the error log. This log maintains all errors that occurred while trying to send a call record to the property management system.



PMS Record Setup: Displays the setup screen (see next section for more information about the setup screen).

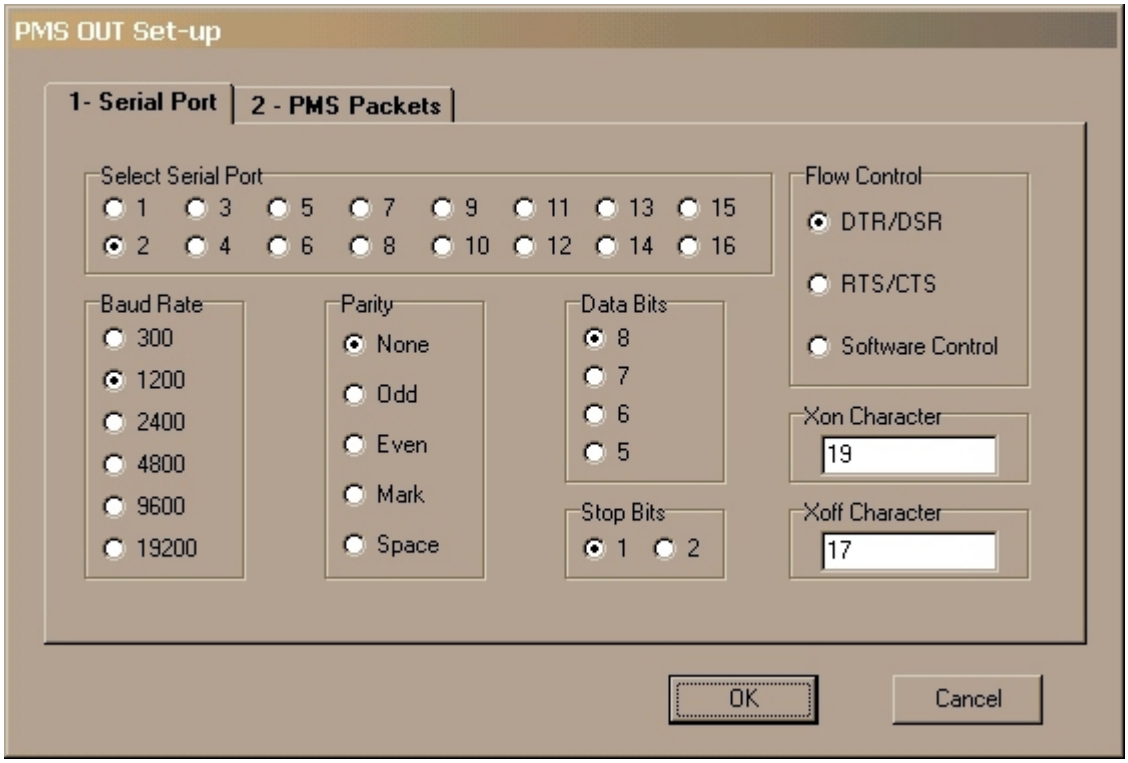
Set Factory Defaults: Returns the settings of PM to those sent by the factory (TEL).
About: Simply shows the splash screen (containing all the release information), but with an OK button so that the user can close the screen when ready. An example of this screen is shown below.

Quit IFPC PM: Terminates the operation of PM and removes it from the System Tray. A confirmation box is displayed asking for confirmation that the user really wishes to stop PM execution.

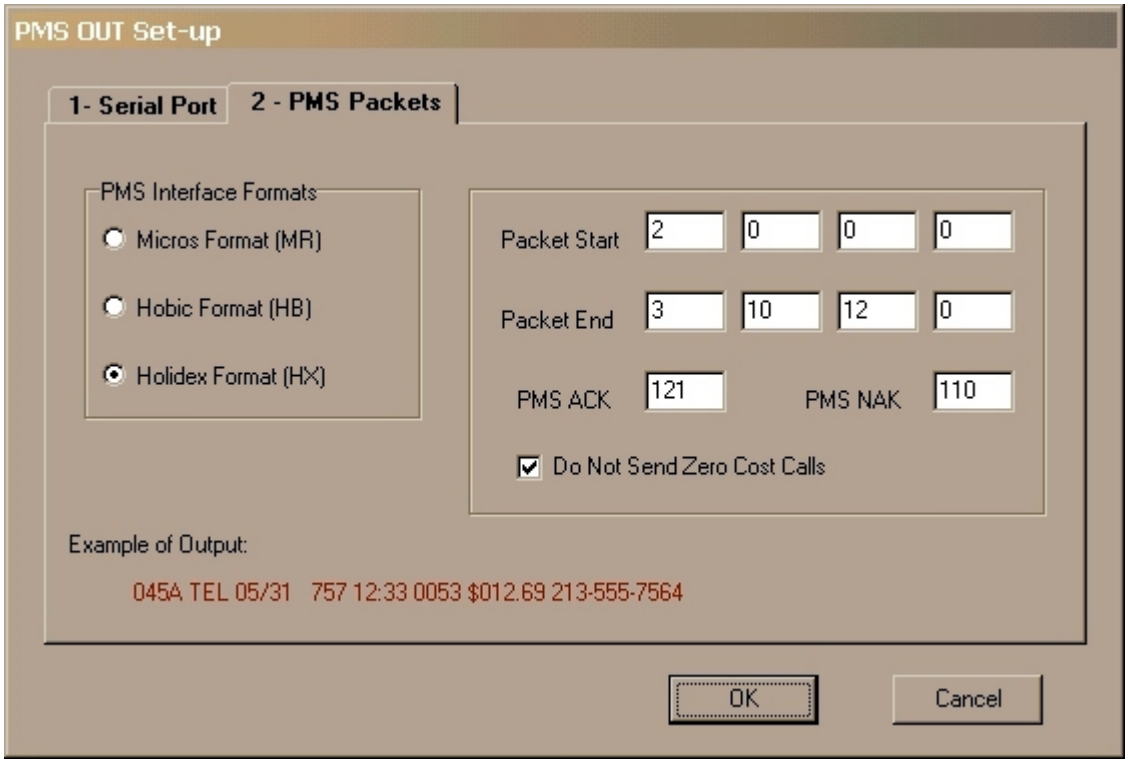


PMS Record Setup

This screen is used to alter the behavior of the PM. In an effort to make this process compact and concise, this screen has two sub-screens called tabs. The user selects the tab which contains the parameters he / she wishes to alter and the appropriate sub-screen will be displayed.



Tab 1: Serial Port. This tab contains all the information needed to setup the serial port for receiving information from the phone system. The user clicks on the appropriate radio button in each group (called radio buttons because when one is selected the others in the group are deselected – like a car radio). Groups which may be set include the serial port number, the Baud Rate, Data bit size, Stop bits, Parity, and Flow Control. If Software Control is selected under the Flow Control section is selected the user may also alter the ASCII code for the XON and XOFF bytes (these bytes are set to the industry standard defaults for XON and XOFF and should only be changed in unique situations).



Tab 2: PMS Packets. The PM module allows for the same property management system interfaces that the standalone hardware TEL products have: Micros, Hobic and Holidex. IFPC PM adds some additional flexibility in that it allows the end user to customize these three basic formats. To do this, the user simply types in the ASCII values of up to the first four characters of the packet start or end. In addition, the user can specify the ASCII values of the ACK and NAK sent by the property management system. There is also a check box that will prevent PM from sending any zero cost calls to the property management system.
.

Explanation of Micros Format

Costed call records are sent to a property management system using the Micros interface format. The following is an example of this format:

ac01027200486680175696 06

All fields are adjacent to each other and the packet always starts with “ac01” and followed by a carriage return (ASCII 13), without a line feed.

Field Definition

Position	Field Name	Format	Comments
1	Start of Packet	ac01	
5	Extension / Room	XXXX	
9	Charge in cents	XXXXXX	
15	Number Called	XXXXXXXXXX	

The PM module will transmit the record packet and then waits for an ACK. If a NAK is received or if nothing is received, the module will wait 3 seconds and then will retransmit the packet. The module will try to send the packet 3 times. If it never receives the expected ACK it will log the packet in a file called PMSERROR.LOG located in the application directory. If the PM System Output Activity alarm is enabled and if the event is over the number of errors set by the user, an alarm will be raised. The event is also logged in the Alarms and Warning section on the PM main window.

The default ACK and NAK are 'y' and 'n' respectively (or ASCII 121 and ASCII 110).

Explanation of Hobic Format

Costed call records are sent to a property management system using the Hobic interface format. The following is an example of this format:

045A TEL 05/31 757 12:33 0053 $012.69 213-555-7564

All fields are separated by a space except the first two with are adjacent to each other. The packet always starts with a line feed (ASCII 10) and followed by a carriage return (ASCII 13) line feed (ASCII 10) and a form feed (ASCII 12).

Field Definition

Position	Field Name	Format	Comments
1	Sequence number	XXX	increments with each packet; resets to 001 every 6 hours
4	Sequence letter	A	increments each time sequence number wraps; resets to A every 6 hours
6	Identifier	TEL	
10	Date of call	MM/DD	
16	Extension / Room	XXXXX	Left justified
22	Time of call	HH:MM	
28	Duration	XXXX	
33	Cost	$XXX.XX	
41	Number Called	XXX-XXX-XXXX	
54	Call Type Indicator	A	L = local call; F = international call; space = all other call types

The PM module will transmit the record packet and then waits for an ACK. If a NAK is received or if nothing is received, the module will wait 5 seconds and then will retransmit the packet. The module will try to send the packet 3 times. If it never receives the expected ACK it will log the packet in a file called PMSERROR.LOG located in the application directory. If the PM System Output Activity alarm is enabled

and if the event is over the number of errors set by the user, an alarm will be raised. The event is also logged in the Alarms and Warning section on the PM main window.

The default ACK and NAK are set to true ACK (ASCII 6) and true NAK (ASCII 21).

Explanation of Holidex Format

Costed call records are sent to a property management system using the Holidex interface format. The following is an example of this format:

045A TEL 05/31 757 12:33 0053 $012.69 213-555-7564

All fields are separated by a space except the first two with are adjacent to each other. The packet always starts with Start of Text (ASCII 2) and followed by an End of Text (ASCII 3), line feed (ASCII 10) and a form feed (ASCII 12).

Field Definition

Position	Field Name	Format	Comments
1	Sequence number	XXX	increments with each packet; resets to 001 every 24 hours
4	Sequence letter	A	increments each time sequence number wraps; resets to A every 24 hours
6	Identifier	TEL	
10	Date of call	MM/DD	
16	Extension / Room	XXXXX	Right justified
22	Time of call	HH:MM	
28	Duration	XXXX	
33	Cost	$XXX.XX	
41	Number Called	XXX-XXX-XXXX	
54	Call Type Indicator	A	L = local call; F = international call; space = all other call types

The PM module will transmit the record packet and then waits for an ACK. If a NAK is received or if nothing is received, the module will wait 5 seconds and then will retransmit the packet. The module will try to send the packet 3 times. If it never receives the expected ACK it will log the packet in a file called PMSERROR.LOG located in the application directory. If the PM System Output Activity alarm is enabled and if the event is over the number of errors set by the user, an alarm will be raised. The event is also logged in the Alarms and Warning section on the PM main window.

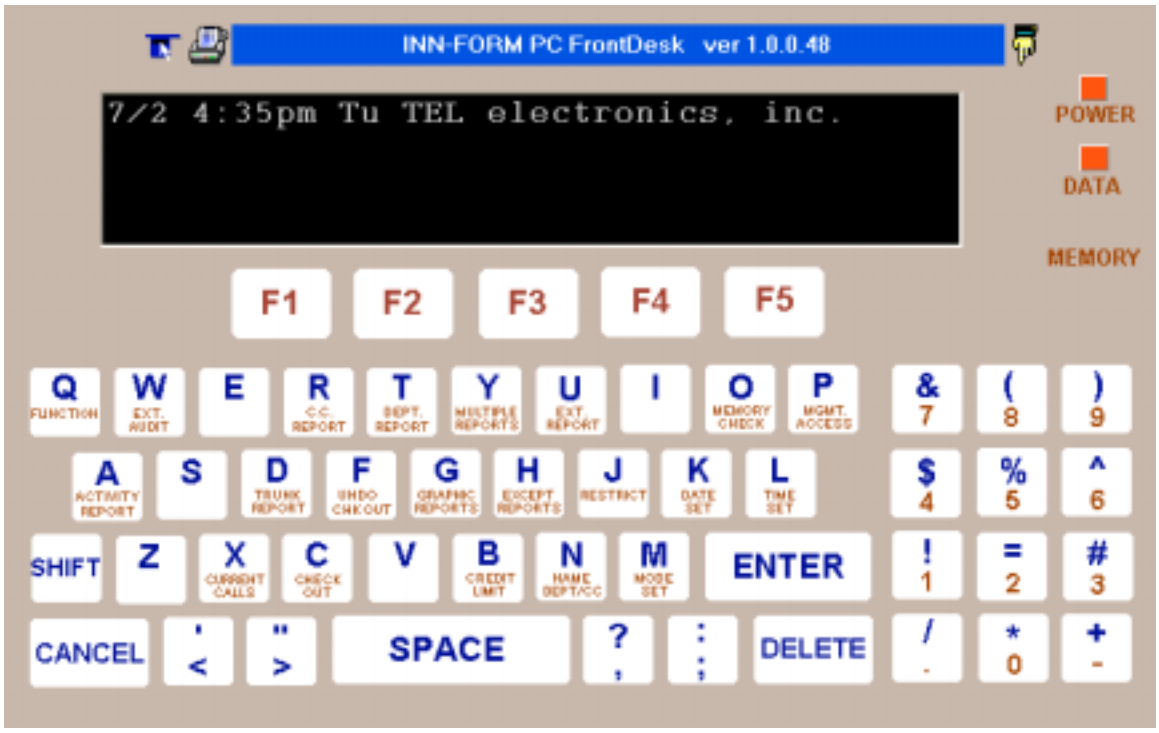
The default ACK and NAK are set to true ACK (ASCII 6) and true NAK (ASCII 21).

Finished Set Up

Once you have made all the changes desired, press OK and the settings are activated immediately. If you change your mind and don't want to make the changes then you can press CANCEL and the changes are disregarded.

Starting IFPC FD

Go to the application directory and double click on the IFPC FD icon (the front desk bell). This will begin IFPC FD.



The title bar will identify the module, the version and build numbers and any other important information concerning this particular release. In the System Tray you will see a smaller version of the FD icon (the front desk bell) as shown below.

Double clicking this System Tray icon will redisplay the main screen. Right clicking this icon will pop up a menu that allows the user to display the main screen or exit IFPC FD.

FD Main Screen

The FD main screen was developed to look very much like the INN-FORM *PLUS* stand-alone call accounting management system sold by TEL. This allows for an easy transition from the stand-alone system to the PC based system.

Near the top of the display you will notice the title bar along with several icons.

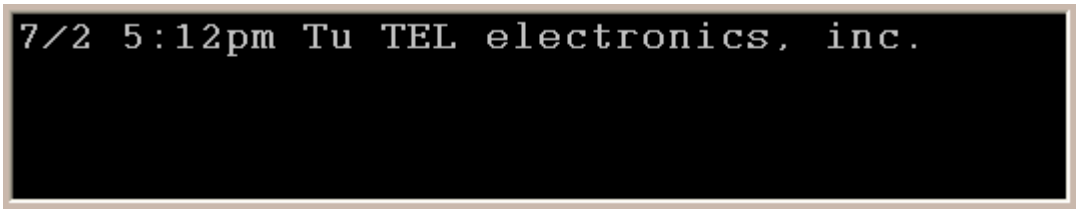
The icons are for easy access to several FD functions:

Menu icon – pops up the FD menu.

Virtual Printer icon – pops up the Virtual Printer window. (See next section for more information about the Virtual Printer window.)

Minimize icon – minimize the FD application display to the System Tray. (This can also be done by double clicking anywhere on the FD display.)

Directly beneath the icons and title bar is the status display. This area displays the current system status along with any input prompts, information messages, etc. Most often it will display the current date and time.



To the right of the status display you will find the status "LEDs". These indicate the working status of FD. The "POWER" LED will turn green if IFPC CP, the call processing module, is currently running. (If CP is not running this LED will be red and call information is NOT being processed or stored.) The "DATA" LED will turn green as call records are received from IFPC CP and stored for reporting. ("MEMORY" is for future development.)

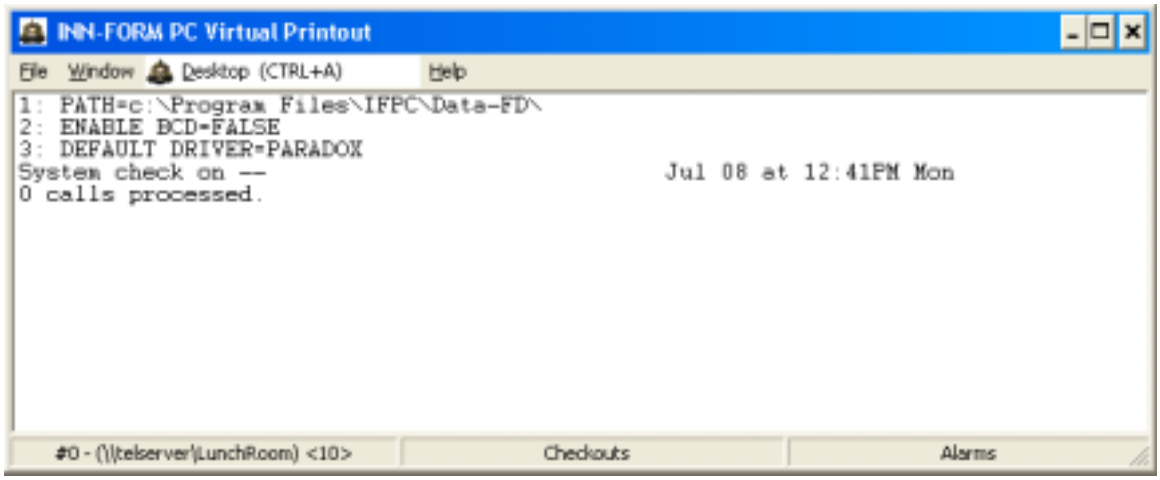
Directly beneath the status display are the "F" keys. These are "soft" buttons – various input values are assigned to them as needed for different reports and applications. The value assigned will show in the last line of the status display directly above the assigned "F" key.

The bottom half of the FD main screen is the keyboard. The keys on the screen can be clicked with the left mouse button or the corresponding keys on the PC keyboard can be pressed. See the "IFPC FD Reports" section for a description of the various functions/reports of FD and how to access them.

FD Virtual Printer Window

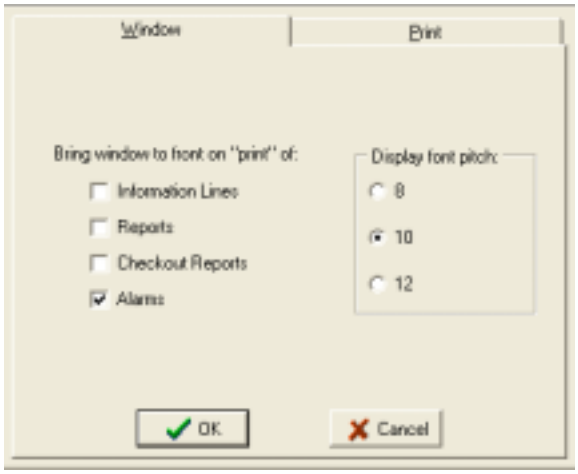
The Virtual Printer window can be accessed by clicking the Virtual Printer icon  , clicking the Menu icon  and selecting “Virtual Printer”, or by pressing Ctrl+A while on the FD main screen.

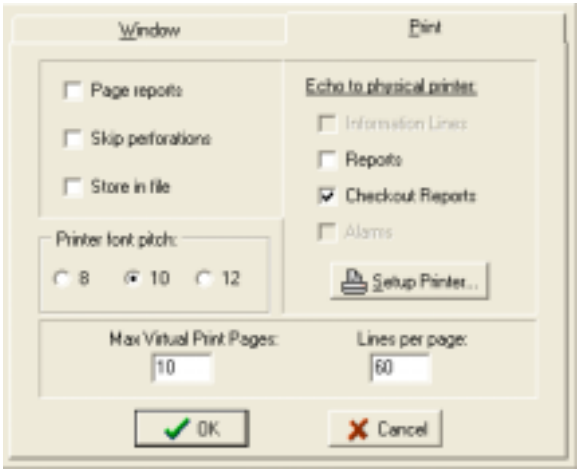
(Ctrl+A can be used to toggle between the Virtual Printer window and the FD main screen.)



The Virtual Printer window consists of a menu, the print area, and a status bar.

The menu allows setup of a physical printer, printing of all or a portion of the print area, window settings, and toggling back to the FD main screen. Window | Settings… pops up a selection dialog that controls how/when the Virtual Printer window is displayed as well as how/when actual printing is done.





The Virtual Printer window can be displayed automatically when various types of items are added to it: Information Lines, such as the system status check every 6 hours; Reports (see IFPC FD Reports section); Checkout Reports; Alarms, such as 911/311 calls. Also, Reports and Checkout Reports can be automatically routed to a physical printer (local or network).

The status bar has 3 sections. The first indicates which printer is the default for physical printing. The middle section shows which virtual print activities will be automatically routed to the physical printer. The last section shows which virtual print activities will cause the Virtual Printer window to automatically display.

IFPC FD Reports

IFPC FD is capable of generating many types of reports. Each report can be classified as one of two types:

- **Regular report** - which simply prints the call record information in the selected report format.
- **Maintenance report** - which affects the stored call records by erasing them all (Audit Reports) or clearing a specified periodic accumulation (Activity and Trunk Reports).

For detailed information on maintenance reports refer to the following sections: Extension Audit, Activity Report, and Trunk Report.

Activity Reports

The Activity Reports summarize all telephone activity during any one of five selected periods (as defined by you) for administrative and guest extensions.

This report summarizes telephone activity into the following information: four types of calls, average time per call, cost of calls, tax applied to cost, rebilling charges, sales tax on charges (if any), and gross profit (if any).

The information on a specific Activity Report will only be cleared by pressing the ***F1*** (YES) key when prompted, "CLEAR ACTIVITY REPORT?" after running an Activity Report. When a specific report is cleared, new information begins to accumulate. Each report will accumulate data until it is cleared. The length of the period for accumulation of data in a report is set by how often the report is cleared.

NOTE: If Report 1 is to be a daily report, then the report can be printed any time, but must be cleared daily. Report 5 might be a yearly report and may be printed whenever you wish to see the information that has been collected year-to-date, but must be cleared once a year.

The information appearing on individual Activity Reports is not erased by an audit.

ƒ To print an Activity Report:

STEP 1. Press ***ACTIVITY REPORT.*** The system will display, "ACTIVITY REPORT (1-5):".

STEP 2. Enter the report number.

EXAMPLE: 1 = Daily, 2 = Weekly, 3 = Monthly, 4 = Quarterly, 5 = Yearly

STEP 3. Press ***ENTER***. (The Activity Report will print.)

STEP 4. The system will display, "CLEAR ACTIVITY REPORT?".

STEP 5. Press ***F1*** (YES) to clear the report and begin collecting new data, or ***F2*** (NO) to leave the report intact and continue collecting data.

This is only an example! You could select other periods such as: shifts, accounting periods, etc. Each Activity Report time period can be set to cover any length of time desired depending on how often the report is cleared.

```
                              TEL ELECTRONICS INN
                                Activity Report
                              May 31 at  1:10PM Fr

5/31 at  4:08AM through 5/31 at  1:10PM

    Type    |   Count  Avg.|     Cost      Tax  |   Charged     Tax  |   Profit
------------------------------------------------------------------------------
Guest Extensions:
Local Calls |    27.   4.1 |      0.00     0.00 |      0.00     0.00 |     0.00
Toll Calls  |    15.  10.4 |      7.26     0.36 |      0.00     0.00 |     0.00
Oper. Calls |     0.   0.0 |      0.00     0.00 |      0.00     0.00 |     0.00
Other Calls |     8.   4.8 |      1.10     0.00 |      0.00     0.00 |     0.00
Total Calls |    50.  19.3 |      8.36     0.36 |      0.00     0.00 |     0.00
------------------------------------------------------------------------------

Non-Billable Extensions:
Local Calls |    52.   3.4 |      0.00     0.00 |      0.00     0.00 |     0.00
Toll Calls  |    34.   2.7 |      8.50     0.43 |     12.75     0.00 |     3.82
Oper. Calls |     1.   1.3 |      1.50     0.12 |      3.00     0.00 |     1.38
Other Calls |    59.  12.1 |      0.00     0.00 |      5.90     0.00 |     5.90
Total Calls |   146.  19.5 |     10.00     0.55 |     21.65     0.00 |    11.10
------------------------------------------------------------------------------

Grand Total |   196   38.8 |     18.36     0.91 |     21.65     0.00 |    11.10

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```

EXAMPLE: Activity Report

Check Out Report

The Check Out Report is used when a Property Management System is unavailable to check out guests (or when there is no Property Management System) and will provide all telephone call charges for a selected extension.

Once this report has been completed, all included calls are checked out and will ordinarily not appear on further Extension or Check Out Reports. If an extension has been checked out in error, the checked out calls may be restored (see Undo Check Out).

ƒ To run a Check Out Report:

STEP 1. Press the ***CHECK OUT*** key. The system will display, "CHECK OUT #".

STEP 2. Enter the extension number to be checked out (up to five digits).

STEP 3. Press ***ENTER***.

STEP 4. The system will display, “xxxxx has nn Calls for $aaa.aa, PRINT?”. (xxxxx = extension number, nn = number of calls, aaa.aa = total call charges)

STEP 5. Press ***F1*** (DETAIL), ***F2*** (SUMMARY), or ***F3*** (NOPRINT). All calls for the selected extension will be checked out and a report will be printed if you selected ***F1*** or ***F2***.

NOTE: You can press *CANCEL* to not checkout the extension.

Undo Check Out

Calls may be restored to an extension which was checked out in error (assuming an Extension Audit Report has not been run).

ƒ To Undo a check out:

STEP 1. Press ***UNDO CHK OUT***. The system will display, “UNDO CHECKOUT FOR #”.

STEP 2. Enter the extension number to undo check out for (up to 5 digits).

STEP 3. Press ***ENTER***.

STEP 4. A Check Out Restore report will be printed.

```
                          TEL ELECTRONICS INN
                            Check Out Restore
                          May 10 at  1:50PM Fr

Extension    114
Totals                              3.9 Minutes       1 Calls      $     3.05
       3.05 $$/Call           0.78 $$/Minute            3.9 Minutes/Call

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```

EXAMPLE: Undo check out report

Cost Center Report

The Cost Center Report presents calling information for a selected cost center.

NOTE: The INN-FORM PC system is capable of sorting call records into as many as five cost centers with 50 departments in each cost center. When the system was customized at the factory for your property, the names and numbers of each were programmed into your system. Cost center/department 1-01 is reserved for guest extensions. Extensions assigned to 1-01 will receive all programmed markups and surcharges. Other cost center/department combinations can be used for your administrative extensions - markups and surcharges will not apply.

If you are not using cost centers, the system always assumes that the cost center is 1. Any unassigned extensions are assumed to be in department 01, cost center 1.

ƒ To print a Cost Center report:

STEP 1. Press ***C.C. REPORT.*** The system will display, "COST CENTER (1-5):".

STEP 2. Enter the cost center number that you wish a report for.

STEP 3. Press ***ENTER***. The system will display, "SUMMARY OR DETAIL?".

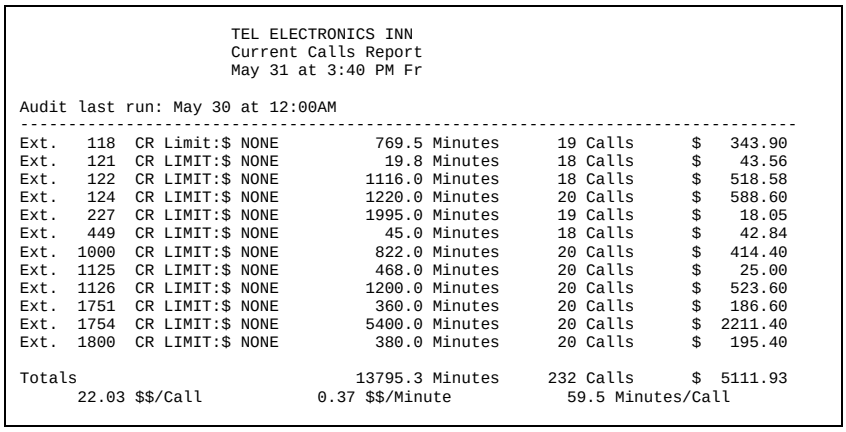
STEP 4. Press ***F3*** (SUM) for a summary report, or press ***F4*** (DET) for a detail report. (The Cost Center Report will print.)

NOTE: A list of departments and cost centers in use, in Extension Audit format, can be obtained by entering 0 at STEP 2.

Current Calls Report

The Current Call Report generates a report of calls currently stored in the system memory that have not been checked out. The report will also include any credit limit in effect for an extension that has an amount balance.

STEP 1. Press ***CURRENT CALLS***. The system will print a list of all current calls since last system audit.



```
                    TEL ELECTRONICS INN
                    Current Calls Report
                    May 31 at 3:40 PM Fr

Audit last run: May 30 at 12:00AM
-------------------------------------------------------------------------------
Ext.   118  CR Limit:$ NONE          769.5 Minutes      19 Calls      $   343.90
Ext.   121  CR LIMIT:$ NONE          19.8 Minutes      18 Calls      $    43.56
Ext.   122  CR LIMIT:$ NONE        1116.0 Minutes      18 Calls      $   518.58
Ext.   124  CR LIMIT:$ NONE        1220.0 Minutes      20 Calls      $   588.60
Ext.   227  CR LIMIT:$ NONE        1995.0 Minutes      19 Calls      $    18.05
Ext.   449  CR LIMIT:$ NONE          45.0 Minutes      18 Calls      $    42.84
Ext.  1000  CR LIMIT:$ NONE         822.0 Minutes      20 Calls      $   414.40
Ext.  1125  CR LIMIT:$ NONE         468.0 Minutes      20 Calls      $    25.00
Ext.  1126  CR LIMIT:$ NONE        1200.0 Minutes      20 Calls      $   523.60
Ext.  1751  CR LIMIT:$ NONE         360.0 Minutes      20 Calls      $   186.60
Ext.  1754  CR LIMIT:$ NONE        5400.0 Minutes      20 Calls      $  2211.40
Ext.  1800  CR LIMIT:$ NONE         380.0 Minutes      20 Calls      $   195.40

Totals                          13795.3 Minutes     232 Calls      $  5111.93
      22.03 $$/Call           0.37 $$/Minute           59.5 Minutes/Call
```

EXAMPLE: Current Calls Report

Department Report

The Department Report presents calling information for a selected department.

NOTE: The INN-FORM PC system is capable of sorting call records into as many as five cost centers with 50 departments in each cost center. When the system was customized at the factory for your property, the names and numbers of each were programmed into your system. Cost center/department 1-01 is reserved for guest extensions. Extensions assigned to 1-01 will receive all programmed markups and surcharges. Other cost center/department combinations can be used for your administrative extensions - markups and surcharges will not apply.

If you are not using cost centers, the system always assumes that the cost center is 1. Any unassigned extensions are assumed to be in department 01, cost center 1.

ƒ To print a Department Report:

STEP 1. Press ***DEPT. REPORT.*** The system will display, "COST CENTER-DEPARTMENT (101-550):".

STEP 2. To print a report for a specific department you must enter both one-digit cost center (1 through 5) and the two-digit department (01 through 50).

EXAMPLE: "307", where 3 represents cost center 3, and 07 represents department 7.

STEP 3. Press ***ENTER***. The system will display, "SUMMARY OR DETAIL?".

STEP 4. Press ***F3*** (SUM) for a summary report, or press ***F4*** (DET) for a detail report. (The Department Report will print.)

NOTE: A list of departments and cost centers in use, in Extension Audit format, can be obtained by entering 0 at STEP 2.

Exception Reports

The Exception Report feature allows you to generate reports based on selected parameters.

This is one of the most powerful features of the INN-FORM PC. With Exception Reports it is possible to view very specific parts of the stored data by defining parameters properly. Call record data may be viewed in an almost unlimited number of ways. The following is a list of the available Exception Reports.

Exception and Graphic Reports

0 = A menu of Exception and Graphic Reports
1 = Duration Over/Under N Minutes
2 = Charge Over/Under Selected NN.NN Dollars
3 = Area Code or State Dialed
4 = Area Code Plus Exchange Dialed (Area Code is Optional)
5 = Phone Number Dialed
6 = Hour of Day
7 = N Longest Calls
8 = N Most Expensive Calls
9 = Trunk Used
10= Multiple Parameters Using "And" Logic
11= Multiple Parameters Using "Or" Logic
12= Numbers Called Over N Times for Each Extension
13= Numbers Called Over N Times for the Entire Organization

Each separate Exception Report is explained in detail below. The instructions for each will explain the parameters available and guide you through the easy to follow input steps.

NOTE: With large amounts of call data, Exception Reports can be time consuming. While the report is being generated, the system is still working, analyzing and storing call data in memory.

EXCEPTION REPORT 1. DURATION OVER/UNDER N MINUTES

ƒ To print Exception Report 1:

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***1***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "MINUTES OVER:". Enter *"0"* for all calls, or the number of minutes (up to 511) and all calls with duration greater than or equal to this selected number will be identified, unless you are doing an inverted report, in which case the system will show all calls with a duration less than the selected number.

STEP 6. Press ***ENTER***. (The report will print.)

EXAMPLE: To print a summary report on calls 35 minutes or longer, at STEP 4 press ***F3*** (SUM) and at STEP 5 enter ***35.*** See the following example printout.

```
                            TEL ELECTRONICS INN
                            Exception Report # 1
                            May 31 at  6:47PM Fr
Duration Over 35 Minutes
Audit last run:  5/30 at 12:00AM
-------------------------------------------------------------------------------
Extension    59                50.5 Minutes       1 Calls            $     23.44
Extension    75                35.8 Minutes       1 Calls            $     16.59
Extension    95                56.0 Minutes       1 Calls            $     21.41
Extension   101                73.0 Minutes       1 Calls            $     34.61
Extension   125                35.5 Minutes       1 Calls            $     15.01
Extension   174                49.1 Minutes       1 Calls            $     20.21
Extension   279                38.7 Minutes       1 Calls            $     16.23

Totals                        338.6 Minutes       7 Calls            $    147.50
```

EXAMPLE: Exception Report 1 in Summary.

EXAMPLE: To print an inverted report in detail for all calls less than one minute, at STEP 4 press ***F1*** (INV), at STEP 5 press ***F4*** (DET), and at STEP 6 Enter ***1. See*** the following example printout.

```
                            TEL ELECTRONICS INN
                            Exception Report # 1
                            May 31 at  6:48PM Fr
Inverse
Duration Over 1 Minutes
Audit last run:  5/30 at 12:00AM
Date   Time    Dept  Ext       Type   Trunk  State  # Called     Min Charges
-------------------------------------------------------------------------------
5/31   1:29PM  1-01   7         Local      7  UT    (801)573-2345 0.7 $ 0.30
5/31  10:59AM  1-01  12         Local     12  UT    (801)878-2345 0.8 $ 0.30
5/31  12:49PM  1-01  48         LDist     48  CA    (805)893-2345 0.7 $ 0.79
5/31   9:59AM  1-01  67         Local     67  UT    (801)930-2345 0.9 $ 0.30
5/31   7:29AM  1-01  67         Local     67  UT    (801)969-2345 0.7 $ 0.15
5/31   9:59AM  1-01  79         LDist     79  CA    (805)998-2345 0.8 $ 0.79
5/31   4:29PM  1-01  92         Local     92  UT    (801)987-2345 0.7 $ 0.76
5/31   1:29PM  1-01 174         LDist     174 AZ    (602)990-2345 0.9 $ 0.24
5/31  12:14PM  1-01 188         Local     188 UT    (801)756-2345 0.9 $ 0.24
5/31   2:29PM  1-01 190         Local     190 UT    (801)328-2345 0.6 $ 0.30

Total                          7.5 Minutes           10 Calls    $  4.23
```

EXAMPLE: Exception Report 1 Inverted and in Detail for All Calls Less Than 1 Minute.

EXCEPTION REPORT 2. CHARGE OVER/UNDER SELECTED NN.NN DOLLARS

ƒ To print Exception Report 2:

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***2***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "CHARGE OVER:". Enter the exact amount (0 to 99.99) you wish to use, in dollars and cents including the decimal point.

NOTE: Amounts up to $99.99 may be entered. For even dollars, it is not necessary to use the decimal point and cent digits. For all calls, including no charge calls, enter 0.

STEP 6. Press ***ENTER***. (The report will print.)

EXAMPLE: To print a summary report of calls over $14.50, at STEP 4 press ***F3*** (SUM), and at STEP 5 enter $14.50.

EXAMPLE: To print an inverted totals report for all calls under $2.00, at STEP 4 press ***F1*** (INV), at STEP 5 press ***F2*** (TOT), and at STEP 6 enter ***2***.

EXCEPTION REPORT 3. AREA CODE DIALED

ƒ **To print Exception Report 3:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***3***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is chosen the system will again offer options. Press the function key that corresponds to your selection.

STEP 5. The system will display, "AREA CODE:". Enter the Area Code (3 digits) desired. If you put a dash in front of the Area Code, the report will include calls to the entire state in which that Area Code is located.

STEP 6. Press ***ENTER***. (The report will print.)

EXAMPLE: For a summary report of calls to Area Code 415 at STEP 4 press ***F3*** (SUM) and at STEP 5 enter ***415***.

EXAMPLE: For an inverted report of calls not to the state of New York, at STEP 4 press ***F1*** (INV), and at STEP 5 enter ***-212.***

EXCEPTION REPORT 4. AREA CODE PLUS EXCHANGE DIALED (AREA CODE IS OPTIONAL)

ƒ **To print Exception Report 4:**

STEP 1. Press ***EXCEPT. REPORTS.***

STEP 2. Enter ***4***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is chosen the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "AREA CODE-EXCHANGE:". Enter the Area Code-Exchange, noting that a dash must be entered between the Area Code and the Exchange.

NOTE: If you do not want to specify an Area Code, but want to see all call records of a selected Exchange, enter the Exchange only and the system will print a report showing all calls to that Exchange whenever it appears, regardless of the Area Code.

STEP 6. Press ***ENTER***. (The report will print.)

EXAMPLE: For a detailed report of all calls in Area Code 801 and Exchange 561, at STEP 4 press ***F4*** (DET) and at STEP 5 enter ***801-561***.

EXAMPLE: For a detail report of all calls to exchange 976 regardless of Area Code, at STEP 4 press ***F4*** (DET) and at STEP 5 enter ***976.***

EXCEPTION REPORT 5. PHONE NUMBER DIALED

ƒ To print Exception Report 5:

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***5***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "PHONE NUMBER:". Enter the Area Code-number, remembering the dash between the Area Code and the rest of the telephone number. (No dash between the Exchange and the last four digits of the number.) You may also enter the telephone number without the Area Code for a report showing all calls to that specified number regardless of the Area Code.

STEP 6. Press ***ENTER***. (The report will print.)

NOTE: To print a report of all calls made to the phone number 555-1212 regardless of the Area Code, enter 5551212 at STEP 5.

EXCEPTION REPORT 6. TIME OF DAY

ƒ To print Exception Report 6:

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***6***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "HOUR (0-23):". Enter the hour (0 through 23).

NOTE: Use military time when entering the hour. Use 0 for the one hour period from midnight to 12:59 a.m., 1 for 1:00 a.m. to 1:59 a.m., and 15 for 3:00 p.m. to 3:59 p.m.

STEP 6. Press ***ENTER***. (The report will print.)

EXAMPLE: To print a totals report for all the calls which occurred between 10:00 a.m. and 11:00 a.m. at STEP 4 press ***F2*** (TOT) and at STEP 5 enter ***10.***

EXAMPLE: For an inverted summary report, showing all calls except those between 5:00 p.m. and 6:00 p.m., at STEP 4 press ***F1*** (INV), at STEP 5 press ***SUMMARY*** and at STEP 6 enter ***17.***

EXCEPTION REPORT 7. N LONGEST CALLS

ƒ **To print Exception Report 7:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***7***.

STEP 3. Press ***ENTER***.

STEP 4. The system will display, "N LONGEST. N (1-40):". Enter the number of calls you wish the system to list (1 through 40).

STEP 5. Press ***ENTER***.

EXAMPLE: For a report of the 10 longest calls, at STEP 4 enter ***10.***

EXCEPTION REPORT 8. N MOST EXPENSIVE CALLS

ƒ **To print Exception Report 8:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***8***.

STEP 3. Press ***ENTER***.

STEP 4. The system will display, "N MOST EXPENSIVE. N (1-40):". Enter the number of calls you wish the system to list (1 through 40).

STEP 5. Press ***ENTER***.

EXAMPLE: To print the 10 most expensive calls, in STEP 4 Enter ***10***.

EXCEPTION REPORT 9. REPORT BY TRUNK

ƒ **To print Exception Report 9:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***9***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "TRUNK:". Enter the Trunk number (0 through 9999).

STEP 6. Press ***ENTER***.

EXAMPLE: To print an inverted summary report showing activity for all Trunks except Trunk 14, at STEP 4 press ***F1*** (INV), at STEP 5 press ***F3*** (SUM), and at STEP 6 enter ***14.***

EXAMPLE: To print a trunk usage by hour report showing the activity of each trunk for each hour of the day, at STEP 4 press ***F3*** (SUM), at STEP 5 enter ***255***, then press ***ENTER***.

EXCEPTION REPORT 10. MULTIPLE PARAMETERS USING "AND" LOGIC

The "And" logic uses duration, charge and Area Code. It requires that the information appearing on the report meets all three of the criteria requested in order to be printed. For instance, for a report showing all calls over 10 minutes in duration "And" over $10.00 in charge "And" in Area Code 801, you would use Exception Report 10 and only calls that satisfied all three of the parameters would appear on the report.

ƒ **To print Exception Report 10:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***10.***

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "MINUTES OVER:". Enter the number of minutes (0 through 511).

STEP 6. Press ***ENTER***.

STEP 7. The system will display, CHARGE OVER:". Enter the exact amount you wish to use (0 through 99.99) in dollars and cents using the decimal point where appropriate.

STEP 8. Press ***ENTER***.

STEP 9. The system will display, "AREA CODE:". Enter the Area Code (0 for all Area Codes or the desired 3 digit Area Code). If you put a dash in front of the Area Code, the report will include calls to the entire state in which that Area Code is located.

STEP 10. Press ***ENTER***. (The report will print.)

NOTE: If you choose to disregard any of the three parameters, enter 0 for that parameter.

EXAMPLE: For a summary report of all calls over 15 minutes, "And" over 10 dollars, "And" to Area Code 212, at STEP 4 press ***F3*** (SUM), at STEP 5 enter ***15*** and at STEP 6 press ***ENTER.*** At STEP 7 enter ***10,*** at STEP 8 press ***ENTER*** and at STEP 9 enter ***212.***

EXCEPTION REPORT 11. MULTIPLE PARAMETERS USING "OR" LOGIC

The "Or" logic report uses duration, charge, and Area Code. It is designed to be less limiting than the "And" logic report. The target information that will appear on this report only has to match one of the first two selected parameters and the last parameter.

Therefore, if you ask for all calls that are 10 minutes in duration "Or" are over $10.00 and are in Area Code 801, you would receive a report of calls in Area Code 801, that are either over 10 minutes in duration or have a charge over $10.00.

ƒ To print Exception Report 11:

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***11***.

STEP 3. Press ***ENTER***. The system will display, "INVERT, TOTALS, SUMMARY OR DETAIL?".

STEP 4. Press the corresponding function key which indicates how you wish the information to appear on the report. If ***F1*** (INV) is selected the system will again offer options. Press the function key that corresponds to your preferred option.

STEP 5. The system will display, "MINUTES OVER:". Enter the number of minutes (0 through 511).

STEP 6. Press ***ENTER***.

STEP 7. The system will display, CHARGE OVER:". Enter the exact amount you wish to use (0 through 99.99) in dollars and cents using the decimal point where appropriate.

STEP 8. Press ***ENTER***.

STEP 9. The system will display, "AREA CODE:". Enter the Area Code (0 for all Area Codes or the desired 3 digit Area Code). If you put a dash in front of the Area Code, the report will include calls to the entire state in which that Area Code is located.

STEP 10. Press ***ENTER***. (The report will print.)

> **NOTE:** If you choose to disregard any of the three parameters, enter the maximum allowed value for duration or charge or 0 for the Area Code.

The "Or" report is based upon calls which match either the duration or the charge. Thus, in the example above, any call over 15 minutes long would be printed, regardless of charge. Calls only need to match one of the first two parameters in the "Or" report, but must match the Area Code, if the third parameter is not a 0.

EXAMPLE: For an inverted totals report showing all calls not over 10 minutes "Or" over 15 dollars to any Area Code (In other words all calls under 10 minutes and under 15 dollars) at STEP 4 press ***F1*** (INV), at STEP 5 press ***F2*** (TOT), at STEP 6 enter ***10*** and at STEP 7 press ***ENTER***. At STEP 8 enter ***15,*** at STEP 9 press ***ENTER,*** and at STEP 10 enter ***0.***

EXCEPTION REPORT 12. NUMBERS CALLED OVER N TIMES FOR EACH EXTENSION

This report considers phone numbers dialed over N times by each extension. This report considers all calls for each extension individually.

ƒ **To print Exception Report 12:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***12.***

STEP 3. Press ***ENTER***.

STEP 4. The system will display, "CALLED N OR MORE TIMES. N:". Enter the number of times called.

STEP 5. Press ***ENTER***. (The report will print.)

NOTE: If the phone number is not shown on any line of the report, then that line is a record of an incoming call to that extension.

EXAMPLE: For a report of any number dialed by an extension 20 or more times at STEP 4 enter ***20*** and at STEP 5 press ***ENTER***.

EXCEPTION REPORT 13. NUMBERS CALLED OVER N TIMES FOR THE ENTIRE ORGANIZATION

This report is similar to report 12 but it considers phone numbers dialed over N times by the entire organization, not by each extension. The more unique numbers there are in the system, the longer this report will take. This report is not as efficient as report 12.

NOTE: With thousands of calls in the system, this report may take hours to execute. Of course, you can press CANCEL at any time to abort the report early.

ƒ **To print Exception Report 13:**

STEP 1. Press ***EXCEPT. REPORTS.*** The system will display a menu of available reports.

STEP 2. Enter ***13.***

STEP 3. Press ***ENTER***.

STEP 4. The system will display, "CALLED N OR MORE TIMES. N:". Enter the number of times called.

STEP 5. Press ***ENTER***. (The report will print.)

NOTE: The information is taken from all extensions collectively. If the phone number is not shown on any line of the report, then that line is a record of an incoming call to that extension.

EXAMPLE: For a report of all numbers dialed 20 or more times at STEP 4 enter ***20***, and at STEP 5 press ***ENTER***.

Extension Audit Report

This audit provides call record information on all extensions in either summary or detail.

NOTE: Because this report erases all call records in the report upon completion, all other desired reports (i.e., Extension, Department, Exception, etc.) should be run first. This report erases call records from the memory-records which cannot be restored. If the ***EXT. AUDIT*** key has been pressed in error, press ***CANCEL*** immediately. The information that appears on the Activity and Trunk Reports is not erased by an audit. It will only be cleared when the ACTIVITY or TRUNK REPORTS are run.

When the Extension Audit Report is initiated, all call records in the specified period are flagged for erasure. When your first Extension Audit Report (in either summary or detail) has been printed, the prompt "ANOTHER AUDIT?" is displayed. The flagged call records have not been erased at this point. You may proceed with generating another Extension Audit Report or a copy of the one just completed. After each report, the "ANOTHER AUDIT?" prompt appears. When all desired Audit Reports are complete and you press ***F2*** (NO), the flagged call records are erased from memory.

STEP 1. Press ***EXT. AUDIT.*** The system will beep twice and read, "WARNING - ERASES CALLS!", followed by the display, "SUMMARY OR DETAIL?".

NOTE: If the *EXT. AUDIT* key has been pressed in error, do not proceed with selected summary or detail. Press ***CANCEL*** now to take you out of the Extension Audit function without loss of call records.

STEP 2. Press the corresponding function key which indicates how you wish the information to appear on the report. (The Extension Audit Report will print.)

After printing is completed, the system will display, ANOTHER AUDIT?". The prompt "ANOTHER AUDIT?" assures you that no flagged call records have been erased yet. At this point, you may select another Extension Audit Report in summary or detail. Thus, different audits can be taken in either or both summary and detail before erasing data.

STEP 3. Press ***F1*** (YES) if another Extension Audit Report is needed, then return to STEP 2, or press ***F2*** (NO), to end the audit and erase all calls from memory.

NOTE: Do not press ***F2*** (NO) until you are sure you have printed as many copies of the various Audit Reports as you need. Once an Audit Report has been generated all call records and report data for the specified period will be permanently marked for erasure and new information will begin to accumulate. Therefore, if ***F2*** (NO) is pressed after an audit has been generated, the call record information will be erased.

Extension Report

This Report presents calling information for a selected extension.

ƒ To print an Extension Report:

STEP 1. Press ***EXT. REPORT***.

STEP 2. Enter the extension number (up to five digits).

STEP 3. Press ***ENTER***. (All calls for the selected extension will be printed.)

NOTE: If you enter a nonexistent extension number or no calls are in the memory for that extension, the system will briefly display, "NO CALLS FOUND".

Multiple Reports

This powerful feature allows the selection of a series of reports, to be defined and entered into the system as a Multiple Report. Six such Multiple Reports may be created. These reports may be run as often as desired and may be changed (redefined) at any time.

The concept behind the Multiple Report function is to streamline the time necessary to generate the reports you use most frequently. Once you become familiar with the INN-FORM PC system, it will be obvious which reports and parameters provide the details most useful for your particular property.

Using the Multiple Report function allows you to "program" the system to give you the necessary reports automatically. A few minutes of setup time is all that is required. To save time when using

the Multiple Report function, first list the reports and their parameters that are to be defined (such as exclusive department, start/end date, etc.). Next, refer to the reports section of this User Guide for keystroke input information for each report on the list. Put these keystrokes in the order that they will occur. Once you have this information in front of you, inputting the keystrokes in logical sequence into the system will be easy.

There are six different Multiple Reports which can be defined. Each report represents a block of 45 keystrokes which can be used to select reports and their parameters. Each Multiple Report can then be generated, as previously defined, by pressing ***MULTIPLE REPORTS*** and entering the Multiple Report number (1-6).

The six different Multiple Reports that can be chained together (for a possible 270 keystrokes). To chain the Multiple Reports together use the last keystrokes in one Multiple Report to call up or activate another Multiple Report. Higher report numbers have priority, and therefore can be used as "subroutines". See the example below for more detail on how this works.

The individual reports that are programmed into a Multiple Report can be programmed to loop on a range of numbers and produce several reports instead of just one. This is done by including Function 27 and its required parameters in the definition of the Multiple Report. For more information on the Universal Number Loop refer to Function 27.

Entering a ***0*** clears all the defined Multiple Reports. Entering a dash in front of a Multiple Report number (***1*** through ***6***) will indicate you wish to define that Multiple Report. The ***CANCEL*** key is used to save a definition and the ***DELETE*** key will erase an incorrect keystroke made during the definition input.

ƒ To define each major report (1 through 6):

STEP 1. Press ***MULTIPLE REPORTS.*** The system will display, "REPORT #".

STEP 2. Enter a dash (-) and the number of the report that you wish to define (1 through 6).

STEP 3. Press ***ENTER***.

STEP 4. The system will display, ":_". Enter the keystrokes necessary to produce the reports, with the parameters you previously defined.

As you enter your series of keystrokes, a letter or symbol representing each keystroke will appear in the display. (See Figure 1. Function Key Letter Assignment Chart.) The display will scroll to the left to make room for subsequent keystrokes.

When you have used the 45 keystrokes for the report being defined, the system will not accept additional entries. If you make an error while entering keystrokes, you can use the DELETE key to correct it. If an error is made and not corrected while entering your keystrokes, the report will not be defined correctly. You may redefine any of the six reports any time you wish by following the same procedure again. To verify that input has been accurate, you may print a listing of your completed keystrokes. The printout will show the letter or symbol from Figure 1. Function Key Letter Assignment Chart.

STEP 1. Press ***MULTIPLE REPORTS.*** The system will display, "REPORT #".

STEP 2. Press 7 (or any number greater than 6). The system will print out a copy of all six defined Multiple Reports.

```
                                    Auto Reports
1: J2@101#H7@KDJ@E4@.48@H76@10@H8@10@
2: J2@2094@Y73@y5@9354@0290@y594@y
3:
4:
5: h7@10@h8@h12@5@
6:
```

EXAMPLE: A Sample Printout of Defined Multiple Reports

Here's a trick! The heading, "AUTO REPORTS", in this printout, is not centered on the page, but rather the "S" in "REPORTS" is at the 45th space - consider it a line marker. You may see from this if you have additional keystrokes which may be used to further define a report; or if you have gone over the allotted 45 keystrokes, and the last keystrokes you entered were not accepted.

FUNCTION KEY LETTER ASSIGNMENT CHART

Function Key	**Letter of Symbol Assigned**
ACTIVITY REPORT	**A**
TRUNK REPORT	**D**
EXCEPT. REPORTS	**H**
RESTRICT	**J**
DATE SET	**K**
TIME SET	**L**
MODE SET	**M**
N KEY	**N**
MEMORY CHECK	**O**
MGMT. ACCESS	**P**
FUNCTION	**Q**
C.C. REPORT	**R**
DEPT. REPORT	**T**
EXT. REPORT	**U**
EXT. AUDIT	**W**
MULTIPLE REPORTS	**Y**
F1	**[**
F2	**]**
F3	**{**
F4	**}**
F5	**|**
ENTER	**@**
DASH	**-**
DECIMAL POINT	**"."**
NUMERIC KEYS	**As Entered**

Figure 1. Function Key Letter Assignment Chart

The following example will define Multiple Report 1 restricted to cost center 1 department 01 for the following:

(1) An Exception Report for all calls over 5 minutes
(2) An Exception Report for all calls over $4.50
(3) An Exception Report on the 10 longest calls
(4) An Exception Report on the 10 most expensive calls

Refer to Figure 2 for the keystrokes necessary to define the previously suggested reports and parameters.

KEYSTROKE	KEY PRESSED	SYSTEM WILL DISPLAY	RESULTS
(1)	***RESTRICT***	J	Restrict 2
(2)	***2***	2	specifies the
(3)	***ENTER***	@	cost center
(4)	***1***	1	and
(5)	***0***	0	department
(6)	***1***	1	
(7)	***ENTER***	@	
(8)	***EXCEPT.REPORTS***	H	This is a
(9)	***1***	1	summary
(10)	***ENTER***	@	report for
(11)	***F3***	{	all calls
(12)	***5***	5	over 5 min.
(13)	***ENTER***	@	
(14)	***EXCEPT.REPORTS***	H	This is a
(15)	***2***	2	summary
(16)	***ENTER***	@	report for all
(17)	***F3***	{	calls over
(18)	***4***	4	$4.50
(19)	***.***	.	
(20)	***5***	5	
(21)	***0***	0	
(22)	***ENTER***	@	
(23)	***EXCEPT.REPORTS***	H	This report
(24)	***7***	7	displays the
(25)	***ENTER***	@	10 longest
(26)	***1***	1	calls
(27)	***0***	0	
(28)	***ENTER***	@	
(29)	***EXCEPT.REPORTS***	H	This report
(30)	***8***	8	displays the
(31)	***ENTER***	@	10 most
(32)	***1***	1	expensive
(33)	***0***	0	calls
(34)	***ENTER***	@	
(35)	***CANCEL***		Ends definition

Figure 2. Automatic Multiple Report

By predefining Multiple Report 1 under the ***MULTIPLE REPORTS*** key as suggested above, the keystrokes for the reports and the parameters are entered one time, then by using the following procedure this same set of reports can be generated as often as needed:

STEP 1. Press ***MULTIPLE REPORTS.***

STEP 2. Enter the number of the previously defined report (1 through 6). In this case 1.

The report would all print automatically saving you many keystrokes each time the Multiple Report function is used.

Higher report numbers have priority, and therefore can act as "subroutines" to lower report numbers. For example, a group of Exception Reports (defined in Report 5) can be run for a number of department exclusions (as defined in Report 2). While Report 2 is processing it will go to the

subroutine defined in Report 5, run the subroutine and return to the exact position in Report 2 to continue (see Figure 3 on following page).

Report 2	**Report 5**
RESTRICT	***EXCEPT. REPORTS***
2	***7***
ENTER	***ENTER***
1	***1***
0	***0***
1	***ENTER***
ENTER	
MULTIPLE REPORTS	***EXCEPT. REPORTS***
5	***8***
ENTER	***ENTER***
	1
RESTRICT	***0***
2	***ENTER***
ENTER	
3	***EXCEPT. REPORTS***
0	***1***
2	***2***
ENTER	***ENTER***
MULTIPLE REPORTS	***5***
5	***ENTER***
ENTER	
RESTRICT	***CANCEL***
2	
ENTER	
5	NOTE: After finishing the
0	Report 5 routine the program
3	sequence returns to the step
ENTER	directly following the step
MULTIPLE REPORTS	that sent it to Report 5.
5	
ENTER	
CANCEL	

Figure 3. Subroutines - Using Report 5 within Report 2

An important thing to remember about Multiple Reports:

- Defined Multiple Reports do not clear when exiting management access.

Restrictions Set on Reports

This feature on the INN-FORM PC system provides a convenient way of setting restrictions for report parameters. With this feature, you may set up parameters to customize your reports. These restrictions are in effect until you leave management access. Each restriction will be explained in detail below.

The possible restrictions are:

1 = Start Date and End Date
2 = Department

3 = Start Time and End Time
4 = Specific Call Types

RESTRICT 1. START DATE AND END DATE FOR REPORTS

Under normal operation, reports include all calls in memory. This restriction will allow you to limit the reports to a specific time frame. Start date begins the time period, and end date ends the time period. Both the start date and the end date are optional. The start date and end date can be changed any number of times or canceled by entering 0 for both the start date and end date. Entering a (-) before the start date or end date subtracts that number from the current date. Thus an automatic daily/weekly/etc. report may be run on the previous day, week, etc.

EXAMPLE: Use a "-1" for a daily report. Use a "-7" for a weekly report. Use a "-0" to examine a report on today's date up to the current time.

The start date and end date are canceled each time you exit management access. This feature applies to Extension Reports, Exception Reports, Graphic Reports, Department Reports, and Cost Center Reports. Only the end date applies to the Audit Reports.

STEP 1. Press ***RESTRICT***. The system will display the four possible restrictions.

STEP 2. Enter ***1***.

STEP 3. Press ***ENTER***. The system will display, "START DATE (0, 0101-1231):".

STEP 4. Enter ***0*** or the desired start date using four digits (See examples below.)

STEP 5. Press ***ENTER***. The system will display, "END DATE (0101-1231):".

STEP 6. Enter ***0*** or the desired end date using four digits.

STEP 7. Press ***ENTER***.

EXAMPLES:

- In order to print reports for calls dated September 25th to and including October 2nd, use start date 0925 and end date 1002.
- In order to print reports for calls made on or after February 22nd, use start date 0222 and end date 0602.
- In order to print reports for calls made on or after February 22nd, use start date 0222 and end date 0.

RESTRICT 2. DEPARTMENT

This restriction allows you to limit certain reports to a guest or non-guest extensions. The exclusive department parameter can be changed any number of times or canceled by entering 0 for the department. This feature applies to Exception Reports and Graphic Reports.

STEP 1. Press ***RESTRICT***. The system will display the four possible restrictions.

STEP 2. Enter ***2***.

STEP 3. Press ***ENTER***. The system will display, "EXCLUSIVE DEPARTMENT (0, 101-550):".

STEP 4. Enter ***1*** (GUEST) or ***-1*** (NON GUEST).

STEP 5. Press ***ENTER***.

RESTRICT 3. START TIME AND END TIME FOR REPORTS

This restriction allows you to specify an exact time period (to the minute) so that reports will only include calls which occurred during the specified time. The time must be entered in military format. This program is helpful for shift studies and can also be used with Restriction 1 to isolate a very specific time period. The start time and end time can be changed any number of times or canceled by entering 0 for both the start time and end time. This feature applies to Extension Reports, Exception Reports, Graphic Reports, Department Reports, and Cost Center Reports.

STEP 1. Press ***RESTRICT***. The system will display the four possible restrictions.

STEP 2. Enter ***3***.

STEP 3. Press ***ENTER***. The system will display, "START TIME (0000-2359):".

STEP 4. Enter the desired time in military format using four digits.

EXAMPLE: 8:00 a.m. = 0800 and 8:00 p.m. = 2000

STEP 5. Press ***ENTER***. The system will display, "END TIME (0, 0001-2359)".

STEP 6. Enter ***0*** or the desired time in military format using four digits.

STEP 7. Press ***ENTER***.

EXAMPLES:

- In order to print reports for calls made between 8:00 a.m. to including 10:00 a.m., use start time 0800 and end time 1000.
- In order to print reports for calls made 6:00 p.m., use start time 0 and end time 1800.
- In order to print reports for calls made after 11:00 p.m., use start time 2300 and end time 0.

RESTRICT 4. SPECIFIC CALL TYPES

This restriction allows you to specify the type of call that will be included on the report. You may invert this restriction to report on all call types except the indicated call type by preceding the call type number with a dash (-). Refer to the call type list below for the 14 types available. The call type restriction can be changed any number of times or canceled by entering 0 for the specific call type. This feature applies to Extension Reports, Exception Reports, Graphic Reports, Department Reports, and Cost Center Reports.

STEP 1. Press ***RESTRICT***. The system will display the four possible restrictions.

STEP 2. Enter ***4***.

STEP 3. Press ***ENTER***. The system will display a menu of call types you may restrict.
STEP 4. Enter a number (***1*** through ***14***), or enter a dash (-) and then a number for an inverted restriction, where:

1 =	Unknown Type	2 =	Local Call
3 =	Direct Dialed Long Distance	4 =	Operator Assisted Call
5 =	Information Call	6 =	Toll Free 800
7 =	Dial-it 900	8 =	Direct Dialed International
9 =	WATS Call	10 =	In-house Call
11 =	Incoming Call	12 =	OCC Call
13 =	Special Rate Call	14 =	Measured Local Call

STEP 5. Press ***ENTER***.

Following is an example of a report generated with all four restrictions.

```
                            TEL ELECTRONICS INN
                            Exception Report # 1
                            May 31 at  4:16PM Fr

Duration Over 1 Minutes
Exclusively for LDist Calls
Exclusively btwn  0:00 & 18:00
Exclusively from  5/28 to  5/31
Exclusively for Guest Calls

 Date    Time   Dept   Ext            Type Trunk State  # Called    Min  Charges
-------------------------------------------------------------------------------
May 31  12:07PM 1-01   223            LDist    2 FL  (305)491-3920   1.4 $  2.31
May 31   1:13PM 1-01   223            LDist    2 FL  (305)776-0576   1.3 $  2.31
May 31   1:18PM 1-01   223            LDist    2 FL  (305)776-5660   1.6 $  2.31
May 31   3:45PM 1-01   223            LDist    2 FL  (305)491-3920   1.4 $  2.31
May 31   3:52PM 1-01   223            LDist    2 FL  (305)772-4484   1.5 $  2.31

Totals                                 7.2 Minutes       5 Calls      $    11.55
       2.31 $$/Call           1.60 $$/Minute             1.4 Minutes/Call

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```

EXAMPLE: Exception Report 1 with all Four Restrictions

Trunk Reports

The INN-FORM PC is equipped to handle up to 155 Trunks. The Trunk Report option will print a report summarizing all telephone activity or traffic for each Trunk during any one of four selected periods (The periods are defined by how often the report is cleared). Pressing the ***TRUNK REPORT*** key and the report number initiates the printing of the data. The information that appears on the Trunk Report will only be cleared by pressing the ***F1*** (YES) key when prompted, "CLEAR TRUNK REPORT?" after running a Trunk Report.

Several Trunk Reports are now available to allow comparisons of activity. These comparisons could be by shift, day, week, etc. Trunks showing activity will be shown on the report. Each property must determine the time periods for such reports by clearing data from each report at some preset interval. To set the time period and clear data, please refer to Trunk Clear.

NOTE: If Report 1 is to be a daily report, then the report can be printed any time, but must be cleared daily. Report 4 might be a yearly report and may be printed whenever you wish to see the information that has been collected year-to-date but must be cleared once a year.

ƒ To print a Trunk Report:

STEP 1. Press ***TRUNK REPORT.*** The system will display, "TRUNK REPORT (1-4):".

STEP 2. Enter the report number (***1*** through ***4***).

STEP 3. Press ***ENTER***. (The Trunk Report will print.)

STEP 4. The system will display, “CLEAR TRUNK REPORT?”.

STEP 5. Press ***F1*** (YES) to clear the report and begin collecting new data, or ***F2*** (NO) to leave the report intact and continue collecting data.

EXAMPLE: 1 = Daily, 2 = Weekly, 3 = Monthly, 4 = Quarterly

This is only an example! You could select other periods such as: Shifts, accounting periods, etc. Each Trunk Report time period can be set to cover any length of time desired depending on how often the report is cleared.

TEL ELECTRONICS INN
Trunk Usage Report #1
May 31 at 4:33PM Fri

From 5/28 at 1:14PM thru 5/31 at 4:33PM

Trunk	Count	Total Time	Total Cost	Time/Call	Cost/Call	Cost/Min.
7	1.	0.7	0.09	0.70	0.09	0.129
11	1.	15.1	5.85	15.10	5.85	0.387
12	3.	14.6	2.75	4.87	0.92	0.188
17	1.	4.9	0.83	4.90	0.83	0.169
19	1.	8.8	3.43	8.80	3.43	0.390
22	1.	3.3	1.81	3.30	1.81	0.549
23	1.	4.2	0.54	2.10	0.27	0.129
24	2.	5.7	2.35	5.70	2.35	0.412
40	2.	15.3	2.82	7.65	1.41	0.184
45	3.	6.3	1.18	2.10	0.39	0.187
Totals:	16.	78.9	21.65	4.93	1.33	0.274

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EXAMPLE: Trunk Usage Report

IFPC FD System Settings

Function 6. Print No Charge Calls (Yes/No)

This function determines whether to print or not print in the Audit Trail those calls which do not incur a charge (e.g., incoming and internal calls).

ƒ **To determine if INN-FORM PC will print no charge calls:**

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

STEP 2. Enter ***6.***

STEP 3. Press ***ENTER***.

STEP 4. Press ***F1*** (YES) to print all no charge calls or press ***F2*** (NO) if no charge calls are not to be printed in the Audit Trail.

Function 7. Print Audit Trail (Yes/No)

This function is used to print or not print an Audit Trail of calls as they occur.

ƒ **To determine the printing status of the Audit Trail:**

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

STEP 2. Enter ***7***.

STEP 3. Press ***ENTER***.

STEP 4. Press ***F1*** (YES) to print the Audit Trail or press ***F2*** (NO) to skip the Audit Trail.

Function 8. Store No Charge Calls (Yes/No)

This function allows you to store or not store those calls with no charge calls in database. Call data is saved for Activity and Trunk Reports, but detailed call records are stored or not stored depending on Function 8. The advantage of storing all calls is you have the complete record of data about telephone traffic for your property. Every call is available for reports, even if it has no charge. Furthermore, the no charge calls use the properties phone system resources just as much as the charged calls. The disadvantage of storing all no charge calls is that reports are longer and disk space is used which could be used for charged calls.

ƒ **To determine the status of storing no charge calls:**

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

STEP 2. Enter ***8***.

STEP 3. Press ***ENTER***.

STEP 4. Press ***F1*** (YES) to store details for all no charge calls or press ***F2*** (NO) to store only summary data.

Function 9. Page Reports

This function allows you to either print your reports on separate pages, or to print one right after the other in order to save paper. (The number of lines on a page can be adjusted to suit your printer in Window | Settings….) If you choose to skip over the perforations, there is a provision for that, listed below.

ƒ **To determine the status of printing INN-FORM PC reports:**

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

STEP 2. Enter ***9***.

STEP 3. Press ***ENTER***. The system will display, "PAGE REPORTS?".

STEP 4. Press ***F1*** (YES) to print on separate pages or press ***F2*** (NO) to print reports running back to back or press ***F3*** (NOSKIP) to print reports over the page perforation or press ***F4*** (SKIP) to have the reports skip the perforation and continue on the next page.

NOTE: The default settings are programmed for no perforation skip and back to back reports.

Function 10. Programmable Parameters Report

This function produces a report with information about your system and permits you to view the programmable parameters for Functions 1 through 9 as they are currently set.

ƒ **To view the programmable parameters for Functions 1-9:**

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

STEP 2. Enter ***10***.

STEP 3. Press ***ENTER***. (The system will print the Programmable Parameters Report.)

```
                        INN-FORM PC Front Desk
                  copyright, TEL electronics, inc.  1999-2001
                  Ver 1.0.0.48     5/31 at  5:11PM    Mode 7
                        Options: Print Audit Trail

                    1       2       3       4       5       6       7       8
                  Local   Oper.  Loc Inf St Inf U.S. Inf 1-(8xx) 1-(900)  Incom
1: Fixed Rates:    0.00    0.00    1.00    1.95    1.95    0.00   25.00    0.00
                  Local   Oper.   Info.  1-(900) Intern.  Other  1-(8xx)
2: Grace Period:     60      30      20      20      75      60      30
   Rate:                    0.00                                    0.05
                Nearby In-State In-U.S. Intern.   WATS  Special
3: Cost% Adjust:  0.00    0.00    0.00    0.00    0.00    0.00
4: Mark-up%:         0      40      40      40       0      75
5: Surcharge:     0.00    1.50    1.55    2.55    0.00    5.00
6: Print No Charge Calls: No
7: Print Audit Trail: Yes
8: Store No Charge Calls: No
9: Page Reports: No
   3   0   0   0   6   0      7   6010
```

EXAMPLE: Function 10 Status Report ** Check this REPORT

Function 20. Print Status of Function 21 through Function 29

This function prints a report listing the current status of Function 21 through Function 29.

ƒ **To print the current status of Functions 21 - 29:**

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

STEP 2. Enter ***20***.

STEP 3. Press ***ENTER***. (The Status Report will print.)

```
  0=801   1=307   2=435   3=208   4=970   5=702   6=775   7=520   8=406   9=505
 10=719  11=541  12=303  13=720  14=308  15=760  16=530  17=916  18=559  19=209


Lines/Page: 11,  Lines to Tear Off:  NA,  Baud Factor:  1200/8N1,  AM/PM: NA
Print Mask:     0,  Clear Mask:     0,  Master Mask:     NA,  User Mask:  NA
```

EXAMPLE: Function 20 Status Report

Function 27. The Universal Number Loop

This function makes it possible for your INN-FORM PC to produce Multiple Reports on a range of numbers instead of just one. As an example, reports can be automatically generated for Extensions 200 through 225 (or for Departments 20 through 40, etc.) using Function 27. When Function 27 is used with Multiple Reports, it can eliminate several keystrokes by looping on this range of numbers.

ƒ **To produce Multiple Reports on a range of numbers:**

STEP 1. Press ***FUNCTION***. The system will display a menu of available programs.

STEP 2. Enter ***27.***

STEP 3. Press ***ENTER***. The system will display, "LOOP FROM:"

STEP 4. Enter the number for the loop to begin on.

STEP 5. Press ***ENTER***. The system will display, "UNTIL:".

STEP 6. Enter the value you want the loop to end on.

STEP 7. Press ***ENTER***.

NOTE: The Multiple Report that uses the Function 27 range of numbers will repeat for each number from the "LOOP FROM:" value to, but not including, the "UNTIL:" value, then that particular Multiple Report terminates and is canceled.

To use the range of numbers set with Function 27 in a Multiple Report Press ***F5*** at the point in the report where the system would prompt for a number. Then have the Multiple Report end by calling itself. See the example below.

EXAMPLE: The next example shows the keystrokes necessary to set up Multiple Reports 1 and 2 to use Function 27.

Multiple Report 1 (Programmed with the keystrokes indicated)

FUNCTION
27
ENTER
200
ENTER

226
ENTER
ENTER
MULTI REPORTS
2
ENTER

By pressing the keys indicated in this example, Function 27 is set for numbers ranging from 200 to 225. Then as the last step in Multiple Report 1 the system is told to go to Multiple Report 2.

EXT. REPORT
F5
ENTER
MULTI REPORTS
2
ENTER

By pressing the keys indicated in this example, the Extension Report will be generated. When the ***F5*** key is programmed into the Multiple Report where the prompt would have asked for an extension number the system automatically uses the range of numbers specified in Function 27 (see above example). Multiple Report 2 ends by calling itself and continues to loop and repeat until it has produced Extension Reports for each number in the range of numbers (not including the "UNTIL:" value).

When Multiple Reports 1 and 2 are set up as indicated above you may activate them by simply following these steps:

STEP 1. Press ***MULTIPLE REPORTS.***

STEP 2. Enter ***1***.

STEP 3. Press ***ENTER***. (For the example explained above, the system will produce Extension Reports on extensions 200 through 225.)

Function 28. Automatic Printing and Clearing

This function allows printing and/or clearing of Activity and Trunk Reports to occur automatically on a daily, weekly, or monthly basis. It also allows the automatic printing of Multiple Reports 1 through 4. These reports can print daily at 12 AM; weekly on Monday at 12 AM; or monthly on the first day of the month at 12 AM. Multiple Report 4 can print whenever the memory is at approximately 10% of capacity.

ƒ To run setup automatic printing and clearing:

STEP 1. Press ***FUNCTION***. The system will display a menu of available programs.

STEP 2. Enter ***28***.

STEP 3. Press ***ENTER***. The system will display, "PRINT MASK:".

NOTE: A mask number represents a set of instructions telling the system how to perform. The numbers that are added together to form the print mask (see Figure 6) represent reports that will be printed.

STEP 4. Select, from Figure 6 below, which reports you want printed, add the numbers in the left column together and enter the **TOTAL**.

EXAMPLE: In order to print:

Daily Activity Reports	1
Monthly Activity Reports	4
Weekly Trunk Reports	32
Weekly Multiple Reports	512
TOTAL	**549**

STEP 5. Press ***ENTER***. The system will display "CLEAR MASK:".

STEP 6. Select, from Figure 6 below, which reports you want cleared, add the numbers in the left column together and enter the **TOTAL**.

EXAMPLE: In order to clear:

Daily Activity Reports	1
Monthly Activity Reports	4
Weekly Trunk Reports	32
TOTAL	**37**

NOTE: The numbers that are added together to form the clear mask (see Figure 6) represent reports that will be cleared. This number does not have to be the same number as the print mask. The clear mask does not clear the information programmed with the Multiple Reports Key.

STEP 7. Press ***ENTER***.

NOTE: When using Multiple Reports with Program 28, be sure to activate management access at the beginning of the Multiple Report. Without management access included at the beginning of the Multiple report, certain function keys will not respond to the Multiple Report during automatic printing.

```
This column shows       This column shows the report
the number to be added  and the time frame in which
into the print mask.    the report will be generated.

ACTIVITY REPORTS
    1 .................. Daily (Activity Report 1)
    2 .................. Weekly (Activity Report 2)
    4 .................. Monthly (Activity Report 3)
TRUNK REPORTS
   16 .................. Daily (Trunk Report 1)
   32 .................. Weekly (Trunk Report 2)
   64 .................. Monthly (Trunk Report 3)
MULTIPLE REPORTS
  256 .................. Daily (Multiple Report 1)
  512 .................. Weekly (Multiple Report 2)
 1024 .................. Monthly (Multiple Report 3)
 2048 .................. When available call memory space
 ....................... is down to approx. 10%.
 ....................... Multiple Report 4)
```

Figure 6. Numbers to Represent Reports

Function 32. Print List of Changeable SMDR Parameters and Ruler Line

This function prints the SMDR parameters which you can program in the IFPC CP application. It also produces a ruler line to help judge mode 8 or 9 printouts.

NOTE: It is suggested that you make a printout of the settings as they come from the factory and then another printout of any changes you make, so you will have a record in case of problems.

ƒ To print a list of changeable SMDR parameters and ruler line:

STEP 1. Press ***FUNCTION.*** The system will display a menu of available programs.

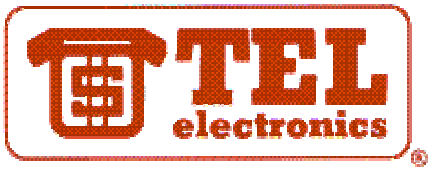
STEP 2. Enter ***32***.

STEP 3. Press ***ENTER***. The system will print the list of the current SMDR parameters and the ruler line.

```
                    SMDR Settings
  0    2   15    2   18    2   21    0    0   21
 34    4   24    4   62    0    0    0    0    0
  0    0    0    0    0    4   20    0   48   47
 58   48    1    6   21    0    0    1    0   85
  9    0   62   24    0    1   -1   -1    4   -1
 56   47   49   56   47

        1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
```

EXAMPLE: Function 32 Status Report



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