Linear SECUR/TY

RA-2400

REMOTE ACCESS SOFTWARE PROGRAM

REFERENCE GUIDE

Reference Manual for Programming the PERS-2400 Personal Emergency Reporting System

FOR TECHNICAL ASSISTANCE CALL:
Linear Technical Services: 1-800-421-1587

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1.1 SOFTWARE DESCRIPTION

What is the RA-2400 Remote Access Software Program?

The RA-2400 Remote Access software is a communications program designed to work with Linear's PERS-2400 Personal Emergency Reporting System. The software runs on an IBM PC or compatible computer and connects to the console through the standard telephone network with the computer's modem. This 32-bit software runs under all Windows operating systems.

RA-2400 software is the only way to program Linear PERS-2400 Consoles (excluding loading transmitters into the Console). RA-2400 sets the options for: Console alarm, audio, and sensors; communicator telephone numbers, call routing, formats, reporting codes and account numbers.

The RA-2400 software has a large help file that can be accessed at any time by selecting "Contents" from the "Help" menu or by pressing the F1 key.

How does RA-2400 connect to a PERS-2400 Console?

Remote Access communicates with the Console over the same phone line the Console uses to send communicator reports. Remote Access can also connect to the Console without a telephone line by directly connecting the Computer modem's LINE jack to the Console's LINE jack using a standard modular telephone cord.

With a telephone line connection (*remote connection*), a special dialing procedure is used. First, Remote Access dials the phone number specified for the Console. Remote Access waits long enough for the phone to ring two or three times, then hangs up. Next, Remote Access waits, then dials again. This second call is answered on the first ring by the Console.

With a direct connection (*local cable connection*), Remote Access prompts the user to place the Console in Test Mode and press the Console's EMERGENCY button to establish the connection.

Once the connection is made, the Console will check if its remote access password matches the calling software's password. If the passwords match, access is granted.

Do I have to be connected to a Console to make programming changes?

Since Remote Access knows the programming structure, you can modify an Account Profile without being connected to a Console. This means you can set all of the values for a specific Console configuration and then connect to a unit and send all of the values that you have set. This is referred to as off-line Console configuration.

How do I change Console settings while on-line?

While on-line with the Console, make any changes to the Account Profile then send the data to change the Console.

Can I make a template with the typical settings for all of my accounts?

Programming "templates" can be created to speed up programming multiple Consoles. Common settings, such as the Central Station telephone number, communicator format, Console and communicator configurations which are shared by all of your accounts can be stored in an Account Profile and used as a template. That template file can be used as a basis for creating each customer Account Profile file (*.PES). See "Using Profile Copies" in the Help contents for more information on creating a template.

How do I add and remove the program's password?

A password can be set to restrict the RA-2400 to authorized users only. To add a password, select "Change Password..." from the "Options" menu. Enter the password in the "New Password" field. Verify it by entering the password again in "Re-type New Password" and click OK.

To remove the password, enter your password in "Old Password", don't enter anything on the "New Password" and "Re-type New Password" fields and press OK.

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1.2   SYSTEM REQUIREMENTS

Minimum System Requirements:

- ✓ IBM compatible 486 personal computer with 8 Mb RAM
- ✓ Windows 95/98/NT/ME/XP/2000 operating systems
- ✓ VGA monitor
- ✓ Name brand modem that is capable of 300 baud (BELL 103 compatible)
- ✓ Hard disk drive with 10 Mb available space for the software plus 18K available space for each Account Profile file.
- ✓ CD drive

Recommended System:

- ✓ Pentium or better based personal computer with 16 Mb RAM or more
- ✓ Windows 95/98/NT/ME/XP/2000 operating systems
- ✓ SVGA video card
- ✓ Microsoft compatible mouse
- ✓ Name brand modem that is capable of 300 baud (BELL 103 compatible)
- ✓ Large hard disk drive (1000 Account Profiles use about 20 Mb)
- ✓ CD drive

1.3   PROGRAMMING OUTLINE

Use the following programming outline to guide you through the steps required to set up the RA-2400 software and program a PERS-2400 Console. Many of the programming options available in the RA-2400 program can be left in their default settings, and do not need to be changed for most installations.

1. SETUP RA-2400 SOFTWARE

◆ Install the software on your computer (Section 1.4).

◆ Test your computer's modem (Section 1.5).

◆ Start the RA-2400 program (Section 2.1).

◆ Set the Communications Setup options (Section 3).

2. CUSTOMIZE AN ACCOUNT PROFILE

◆ Open a new Account Profile (Section 4.1).

◆ Enter customer information (Section 4.2).

◆ Set the Console's alarm options (Section 4.3).

◆ Set the Console's audio options (Section 4.4).

◆ Enable the Console's communicator and choose a communicator format (Section 4.6).

◆ Choose the communicator's account number, telephone numbers, and trouble report routing (Section 4.7).

◆ Set the communicator status reporting options (Section 4.8).

3. PROGRAM THE CONSOLE WITH THE ACCOUNT PROFILE

◆ Choose an Account Profile (Section 5.2).

◆ Connect to the Console (Section 5.3).

◆ Send the data to the Console (Section 5.4).

IMPORTANT:
AFTER ANY PROGRAMMING CHANGES ARE MADE TO A CONSOLE, PERFORM THOROUGH TESTING TO VERIFY THAT THE CONSOLE OPERATES AS INTENDED.

1.4   PROGRAM INSTALLATION

The RA-2400 Remote Access Program is supplied on a CD-rom. The installation program will create a directory on your hard disk drive. Be sure that you have at least 10 megabytes free on the hard disk for the program and any Account Profile files that you create.
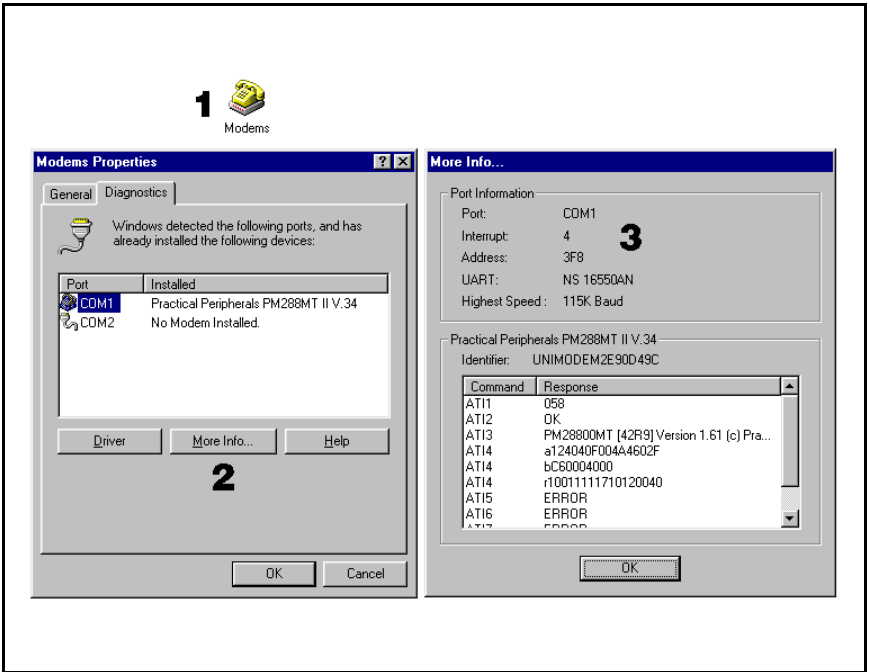
To Install the Remote Access Program:

♦ The first step is to close all other running programs.

♦ Place the Remote Access CD into your computer CD drive.

♦ The installation process should start automatically. If the CD does not auto run, use Windows Explorer to find RASETUP.EXE on the CD. Double-click on RASETUP.EXE and install program will start.

♦ Click the Next button to install the Remote Access software. Follow the on-screen instructions as the setup program creates the directory and copies the program files onto your hard disk. A Remote Access icon will be created on your desktop screen.

♦ If you are performing a reinstallation, or an update, you will be prompted to uninstall RA-2400 first. After the uninstall is completed, browse to the appropriate drive letter for your CD drive and double-click on RASETUP.EXE. Then follow the on-screen steps to install the Remote Access software.

☞ NOTE: If Windows asks whether to replace existing .DLL files, first answer NO. If RA-2400 fails to run, re-install RA-2400 and answer YES to replace existing .DLL files.

♦ Remove the CD and store it in a safe place.

To Remove the Remote Access Program:

♦ Press START, SETTINGS, CONTROL PANEL. Double-click on ADD/REMOVE PROGRAMS.

♦ Select LINEAR RA-2400 and click the ADD/REMOVE or CHANGE/REMOVE button depending on your Windows Operating system.

1.5   TESTING THE MODEM

Before you run the Remote Access Program, be sure that the computer is running correctly and that the modem is installed and working properly.

To Test the Modem:

Windows Control Panel can be used to test the modem and determine what COM port it is connected to.

◆ Press START, SETTINGS, CONTROL PANEL. Double-click on MODEMS.

◆ Verify that a modem is shown in the Modem Properties window.

◆ Click on the DIAGNOSTICS tab. The modem installed with the COM port highlighted should be shown.

◆ Note the COM port information. It is used when setting COM port in the Communications Setup window (see Section 3.1).

◆ Test the modem by pressing the MORE INFO... button. IF THE MODEM IS CONNECTED AND WORKING PROPERLY, THE "MORE INFO" WINDOW WILL DISPLAY DETAILED MODEM INFORMATION. If the modem is not working properly, Windows will notify you.

2.   OVERVIEW

☞ *NOTE: Experienced computer or PC users should find that entering data and navigating around the RA-2400 program dialog boxes is similar to most other Windows programs. New users, or users unfamiliar with running Windows applications, should refer to the Windows help file for details on using Windows.*
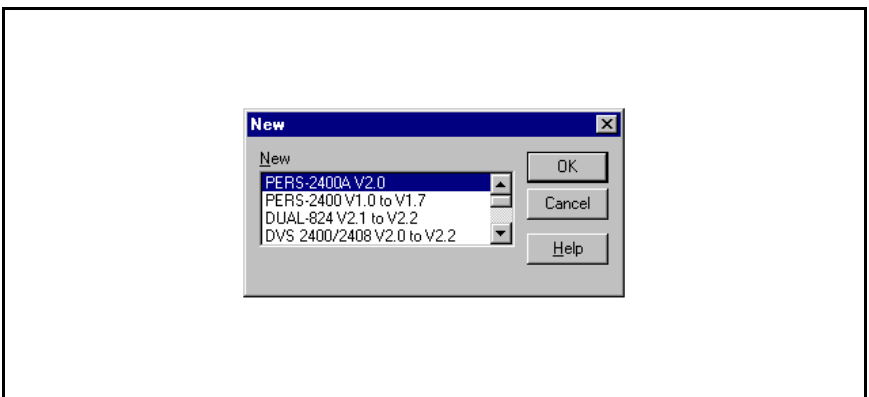
2.1 STARTING THE PROGRAM
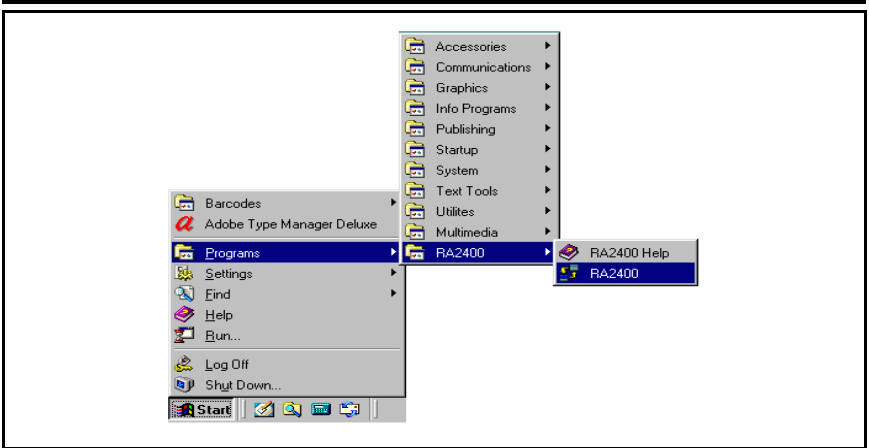
To Run the Program:

✦ Press START, point to PROGRAMS, RA2400 and click on RA2400.

2.2 NEW WINDOW

PURPOSE:

To select an Account Profile template for the type of unit being programmed.

USER RESPONSE:

✦ Select PERS-2400A V2.0

✦ Press OK.

The RA-2400 program window will appear with a starter template called PERS-2400A V2.0-1 showing in the workspace. This file can be stored later, under any name, using SAVE AS... in the FILE menu (see Section 2.3).

2.3   MENU BAR

PURPOSE:

To provide access to each of the programs sub-menus.

The sub-menus that can be accessed from this menu are:

File

NEW

To select an Account Profile template for the type of unit being programmed.

OPEN

Loads a saved Account Profile into the RA-2400 workspace. Multiple Account Profiles can be open at the same time in the RA-2400 workspace. They can be arranged in the workspace using the Window menu on the menu bar, or by dragging them around manually.

CLOSE

Closes the active Account Profile. If there were any changes to the file, Windows will ask if you want to save the changes.

SAVE

Saves the active Account Profile to the hard drive, overwriting the existing .P20 file.

SAVE AS…

Saves the active Account Profile while giving the option to change the name or location of the .P20 file.

PRINT…

Opens the PRINT window to allow printing of the active Account Profile. Resulting printout is the entire content of the Account Profile .P20 file in text format.

PRINT PREVIEW

Shows what will be printed on the screen with options to zoom in or print the document.

RECENT FILE LIST

Shows the last four file names (with paths) that were opened in RA-2400. Clicking on a file opens it.

EXIT

Closes the RA-2400 program. If any open Account Profiles have changed, Windows will ask if you want to save them.

VIEW

TOOLBAR
When checked, the toolbar is displayed. NOTE: The toolbar can be turned into a re-sizable floating toolbar window by dragging it out of its docked location at the top of the workspace. The toolbar accesses many of the popular menu items. Hover the mouse pointer over the toolbar button to see a description of the button.

STATUS BAR
When checked, the status bar is displayed at the bottom of the workspace.

COMMUNICATIONS

SETUP…
Opens the Communication Setup window. Used for setting up the modem and connection type (local or remote).

SEND/RECEIVE…
Opens the Send/Receive window. Used for connecting to a Console to send or receive data or to turn the Console's activity timer on or off.

OPTIONS

CHANGE PASSWORD
Opens the Change Password window. Used for changing or removing the password required to enter the RA-2400 program. THIS IS NOT THE REMOTE ACCESS PASSWORD USED TO CONNECT TO THE PERS-2400 CONSOLE.

WINDOW

CASCADE
Arranges all open Account Profile windows layered across the workspace.

TILE
Arranges all open Account Profile windows next to each other in the workspace.
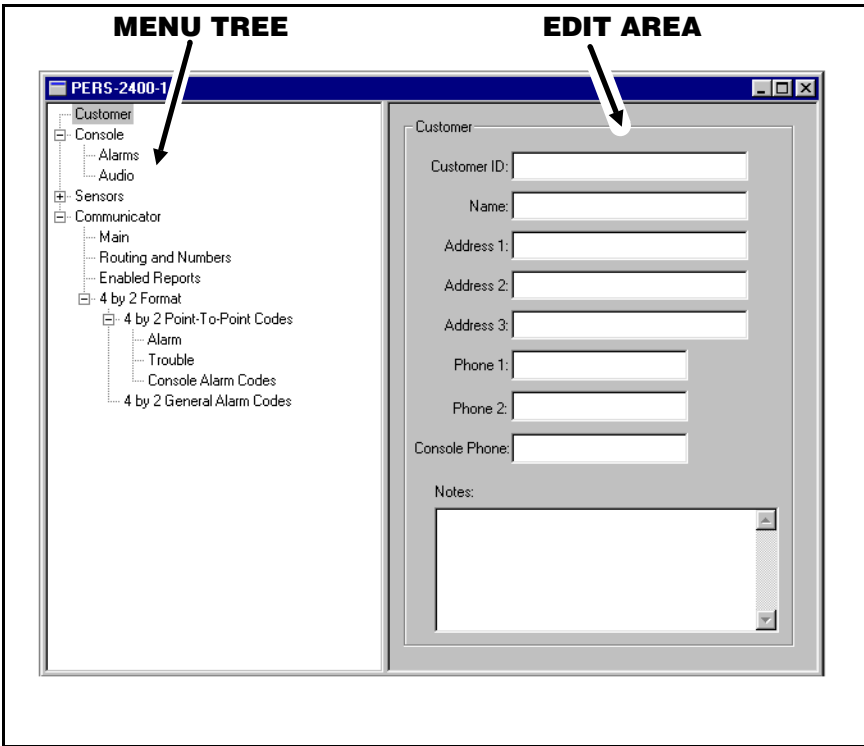
HELP

CONTENTS
Opens the help Contents search window. Used for accessing the RA-2400's built-in help file.

ABOUT RA-2400 REMOTE ACCESS
Displays the version number of the RA-2400 software.

2.4 ACCOUNT PROFILE WINDOW OVERVIEW

MENU TREE   **EDIT AREA**

PURPOSE:

To enter data and make changes to an Account Profile and customize it for a specific installation.
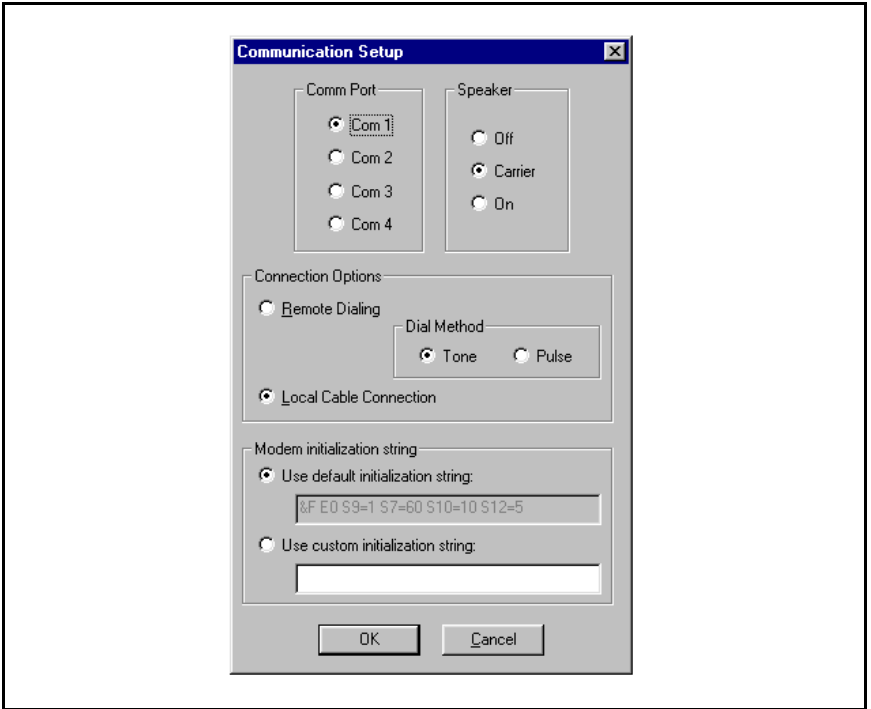
MENU TREE

Used for selecting the various data entry fields in the Account Profile. Clicking on the plus (+) symbols expands the branches of the menu tree. Clicking on the minus (-) symbols collapses the menu tree branch. Clicking on an item displays the data entry fields in the edit area or other information.

EDIT AREA

Used for adding and changing the data in the Account Profile. Click on the check boxes, buttons, and enter text and numbers in the data areas to modify the Account Profile.
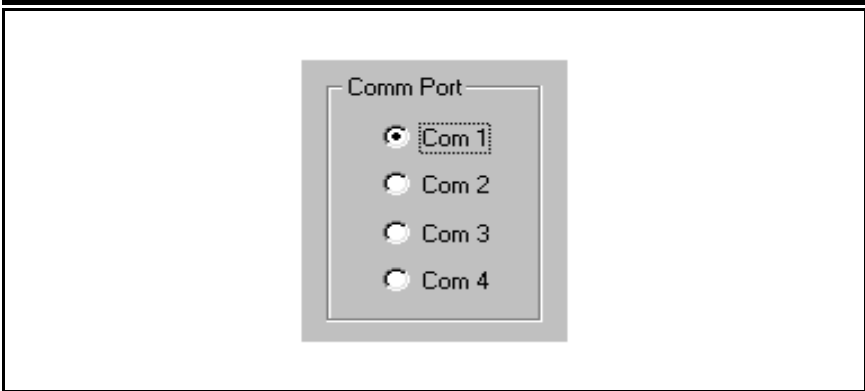
3. COMMUNICATIONS SETUP

PURPOSE:

The communications setup window sets the COM port for the modem, the modem's speaker characteristics, type of connection (local or remote), dialing method (tone or pulse), and modem initialization string.

USER RESPONSE:

✦ From the COMMUNICATIONS menu, select SETUP... to view the Communications Setup window.

✦ See Sections 3.1 - 3.4 and make any changes as required.

✦ After making any changes to the Communication Setup window, click OK to accept the changes and close the window.

3.1   COM PORT

PURPOSE:

To select which communications (COM) port the modem is connected to.

USER RESPONSE:

✦ Click on the COM port number (1, 2, 3, or 4) that the modem is connected to.

☞ *NOTE: See the TESTING THE MODEM Section (1.5) of this manual for determining the proper COM port number.*

3.2   SPEAKER

PURPOSE:

To set how the modem's speaker functions before and during communications.

USER RESPONSE:

✦ Select OFF to silence the modem's speaker at all times.

✦ Select CARRIER to hear the modem connect and have the speaker silenced when the RA-2400 is connected to the PERS-2400 Console.

✦ Select ON to hear the modem connect and hear the RA-2400 communicate with the PERS-2400 Console (for testing only).

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3.3   CONNECTION OPTIONS
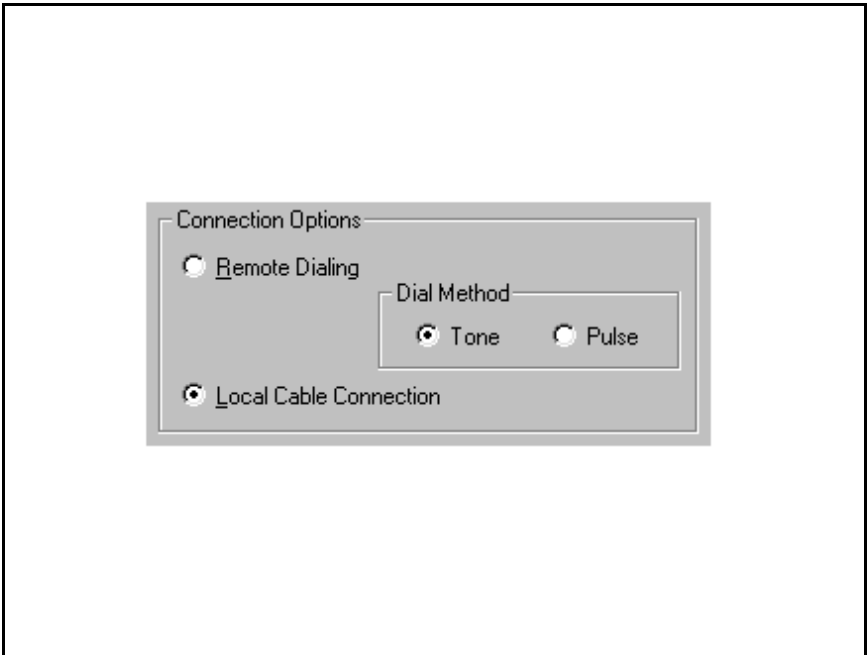
PURPOSE:

To choose how the modem will connect to the PERS-2400 Console.

Remote Dialing dials a telephone number with the method chosen (tone or pulse) to connect with the Console over a standard telephone line.

Local Cable Connection does not dial a telephone number, but communicates with the Console wired directly to the modem.

USER RESPONSE:

✦ Select REMOTE DIALING if the Console is going to be accessed over the telephone line.

✦ Select TONE or PULSE depending on the requirements for your telephone system. NOTE: This only effects Remote Dialing.

✦ Select LOCAL CABLE CONNECTION if the Console's LINE jack is connected directly to the modem's LINE jack. (See PERS-2400 Installation Instructions for local cable connection information.)
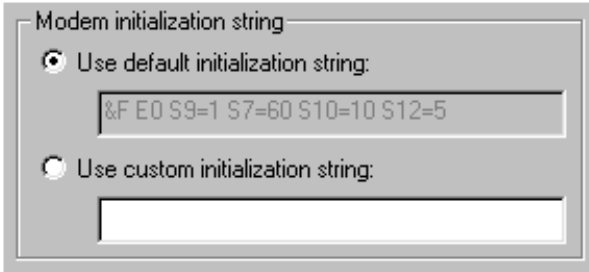
PURPOSE:

Used to choose whether the default or a custom initialization "string" is sent to configure the modem (*a "string" is a series of characters that are commands for the modem*). Modem's use initialization strings to setup their speed, data type, and other options. The RA-2400 sends the initialization string to the modem before using the modem to connect to the PERS-2400.

☞ *NOTE: There are hundreds of models of modems available, each with unique characteristics. Instead of using the default modem string, some modems may perform better with a custom initialization string.*

USER RESPONSE:

✦ Leave USE DEFAULT INITIALIZATION STRING option selected unless you are are having trouble connecting with your modem.

✦ IF YOU ARE HAVING TROUBLE CONNECTING WITH YOUR MODEM, **and it tests OK with the Windows modem test diagnostics (see Section 1.5),** try using a custom initialization string. Various model modems have different requirements for initialization strings. Refer to your modem's manual for the required commands to place the modem in **300 BAUD BELL 103** configuration.

☞ *NOTE: When entering a custom initialization string, don't enter the "AT" command. The RA-2400 program will do this automatically.*

4. CREATING A CUSTOM ACCOUNT PROFILE

Each installation requires an Account Profile. While many items are the same in different Consoles reporting to the same Central Station, some items (account number, customer information, & sensor information) are unique for each installation.

A custom Account Profile is created by editing the PERS-2400 Account Profile template included with the RA-2400 software. The customized profile should then be saved with a unique name for the account and then sent to the PERS-2400 Console.

To provide a clean start. Close any open Account Profiles on the workspace.

4.1   NEW WINDOW
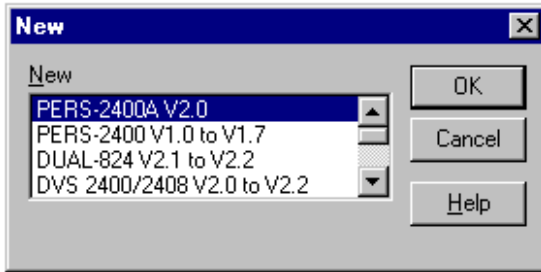
PURPOSE:

To select an Account Profile template for the type of unit being programmed.

USER RESPONSE:

NEW

✦ Click on NEW icon on toolbar or select NEW from the FILE menu.

✦ Select PERS-2400A V2.0

✦ Click OK.

The new Account Profile will appear as a starter template called PERS-2400A V2.0-1 (or -2, -3, etc.) in the workspace.

4.2   CUSTOMER INFORMATION

PURPOSE:

For entering customer information specific to the installation for the Account Profile.

USER RESPONSE:

CUSTOMER

☞ *NOTE: All fields are optional and do not have to be filled in. This information is not sent to the Console.*

✦ Enter a Customer ID for the installation.

✦ Enter the customers name in the NAME field.

✦ Enter the customers address in ADDRESS fields 1, 2, & 3.

✦ Enter the customers telephone number(s) in PHONE fields 1 & 2.

✦ Enter the number of the telephone line that the Console is connected to in the CONSOLE PHONE field. This field will show as the telephone number for the account in the Send/Receive window.

☞ *NOTE:* **DO NOT** *enter any dashes or spaces into the telephone number fields. Enter numbers only.*

✦ Enter any special information about the customer in the NOTES field.

4.3   CONSOLE ALARMS
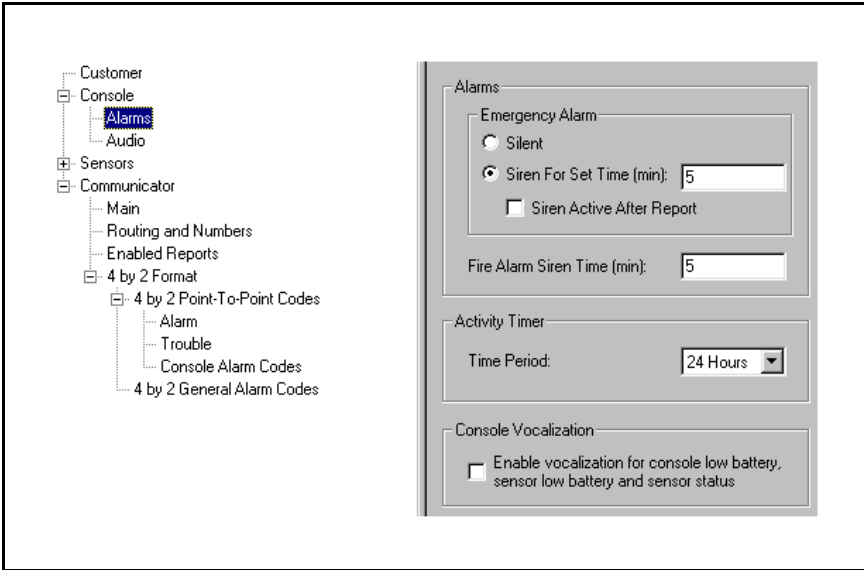
PURPOSE:

For setting the way the emergency and fire sirens work. Also sets the activity timer period and the option for vocal annunciation of low batteries and sensor status.

USER RESPONSE:

ALARMS

✦ Select SILENT to disable the Emergency siren or select SIREN FOR SET TIME for a timed siren after activation. With timed siren selected, enter the length of time (in minutes) for the siren to run.

✦ Check the SIREN ACTIVE AFTER REPORT box if you want the siren to continue after the communicator report to the Central Station is complete (does not effect the fire siren).

✦ Enter the length of time (in minutes) for the fire siren to run in the FIRE ALARM SIREN TIME field.

ACTIVITY TIMER

✦ Click the arrow to show a list of settings for the Activity Timer. Select 8, 12, or 24 (hours), or DISABLED. This is the length of time the customer has to press the HOME button on the Console to prevent an inactivity alarm from occurring. DISABLED prevents the Activity Timer from running.

CONSOLE VOCALIZATION

✦ Check the ENABLE VOCALIZATION to have the Console announce (beeps or voice) Console low batteries, sensor low batteries, and sensor status exceptions.

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4.4   CONSOLE AUDIO
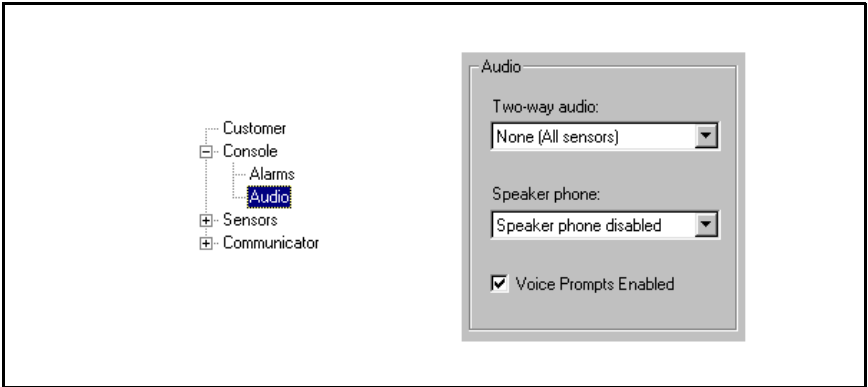
PURPOSE:

To select how the Voice Board operates. **NOTE: The Model VB-4 Voice Board must be installed to use these options.** Audio modes for monitoring with the Console's built-in microphone and communicating through the speaker to the customer are selectable. The human voice prompts from the Voice Board are selectable.

With 2-way Audio enabled, after the Central Station operator acknowledges the communicators report, the Console will stop its siren and switch to the selected audio mode for 90 seconds.

USER RESPONSE:

CONSOLE AUDIO

✦ Click the arrow to show a list of settings for Two-way Audio and select the desired mode.

NONE
Audio Board will not report as an audio account to the Central Station. No audio monitoring will occur.

LISTEN ONLY
The operator will be able to hear sound from the Console but will not be able to talk through the Console's speaker. Pressing "9" on a telephone connected to the line disconnects the call.

TWO-WAY MANUAL
The operator will be able to hear sound from the Console and will be able to talk through the Console's speaker. The operator can switch from listen to talk by pressing "1", or switch from talk to listen by pressing "3" on a telephone connected to the line. Pressing "9" disconnects the call. Press any key but "9" to extend the time 90 seconds.

TWO-WAY DUPLEX
The operator will be able to hear sound from the Console and will be able to talk through the Console's speaker. The audio board will listen until the operator speaks, then the voice activation will switch the voice board to talk as long as the operator speaks. The operator can still switch from listen to talk manually by pressing "1", or switch from talk to listen by pressing "3" on a telephone connected to the line (the voice board will remain in manual mode, with increased volume). Press "8" to return to duplex mode. Pressing "9" disconnects the call. Press any key but "9" to extend the time 90 seconds.

CONSOLE SPEAKER PHONE

✦ Click the arrow to show a list of settings for Speaker phone and select the desired mode.

SPEAKER PHONE DISABLED
Speaker phone feature will not be available.

SPEAKER PHONE ENABLED (15 MINUTES)
The communication link will be automatically disconnected after 15 minutes, even if a call is in progress.

SPEAKER PHONE ENABLED (30 MINUTES)
The communication link will be automatically disconnected after 30 minutes, even if a call is in progress.

SPEAKER PHONE ENABLED (60 MINUTES)
The communication link will be automatically disconnected after 60 minutes, even if a call is in progress.

✦ Check the VOICE PROMPTS ENABLED box to have the Console announce system events with a digitally synthesized human voice.

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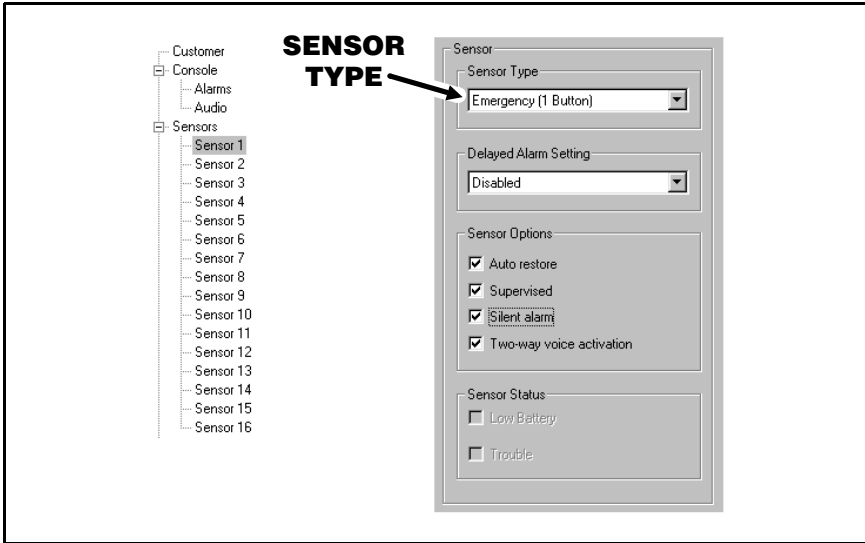
4.5 SENSORS

PURPOSE:

To display and edit sensors installed in the Console's memory. Up to 16 sensors may be installed, each with its own type, restore and supervision options. The status of the sensor selected is also displayed.

☞ *NOTE: To display and edit sensors installed in the Console, the sensor data must first be received from the Console (see Section 5.4).*

USER RESPONSE:

SENSOR TYPE

✦ Click on the sensor in the menu tree to view it.

✦ View or edit the SENSOR TYPE.
  The sensor type options are:

NOT INSTALLED
No sensor has been stored in this sensor location. Also can be used to remove a sensor from the Console's memory.

FIRE
Sensor will trigger the fire siren and report the fire code to the Central Station.

ACTIVITY RESET
Sensor will reset the Activity Timer, preventing an inactivity report.

#### EMERGENCY (1 BUTTON)
Sensor is a one-button transmitter that will trigger the emergency siren and report the emergency code to the Central Station. *NOTE: 2-button Model DXS-63's are special and should be set to this option.*

EMERGENCY (2 BUTTON)
Sensor is a two-button transmitter. Both buttons must be pressed to trigger the emergency siren and report the emergency code to the Central Station.
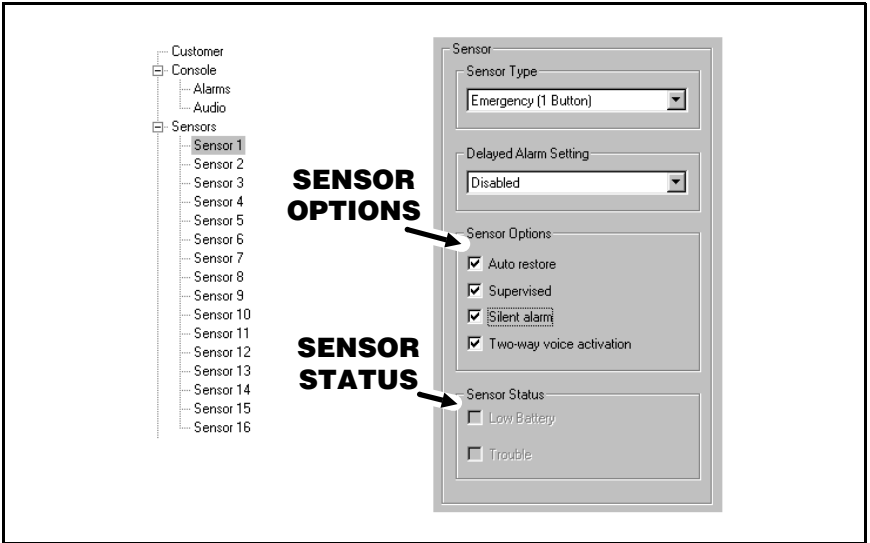
DELAYED ALARM SETTING

✦ Click on the sensor in the menu tree to view it.

✦ View or edit the DELAYED ALARM SETTING.
The delayed alarm settings are:

DISABLED
An alarm transmission received on specified zones will not be delayed.

15 MINUTE DELAY
An alarm transmission received on specified zones will be delayed for 15 minutes.

30 MINUTE DELAY
An alarm transmission received on specified zones will be delayed for 30 minutes.

☞ *NOTE: If a transmitter restore is received prior to the timeout period, then the alarm will be automatically cancelled and the unit will return to normal standby operation. This function is ignored for Fire and Activity Reset sensors.*

SENSOR OPTIONS

✦ View or edit the SENSOR OPTIONS. These options are automatically set when the sensor is programmed into the Console.
The sensor options are:

AUTO RESTORE
This box should be checked for all model sensors except the Model DXS-31.

SUPERVISED
This box should be checked for all sensors that send periodic status reports. DXT sensors do not send periodic status reports. **REMOVE THE CHECK FROM THIS BOX IF A MODEL DXT SENSOR HAS BEEN PROGRAMMED INTO THIS SENSOR LOCATION** or if you don't want supervision for that sensor. This will keep the Console TROUBLE indicator from lighting due to missing status reports.

☞ *NOTE: The sensor can still report a low battery condition (see Section 4.8) this will cause the Console's TROUBLE indicator to flash.*

SILENT ALARM
This box should be checked for all sensors that need to be silent locally. Fire or Activity Reset sensors will not be silent.

TWO-WAY VOICE ACTIVATION
This box should be checked for all sensors that require two-way voice activation. Checking this box will not enable Two-way audio if NONE is selected in the CONSOLE AUDIO screen.

SENSOR STATUS

✦ View the SENSOR STATUS to see the condition of the sensor selected.
The sensor status conditions are:

LOW BATTERY
The sensor has sent a low battery signal to the Console. Replace the sensor's battery.

TROUBLE
The Console has not received a status report from this sensor in 24 hours. Sensor may have been out of range of the Console's receiver, or the sensor may be non-functional.

☞ *NOTE: After any changes are made to the sensor type or sensor options, test the sensor to verify proper operation.*

4.6   COMMUNICATOR MAIN
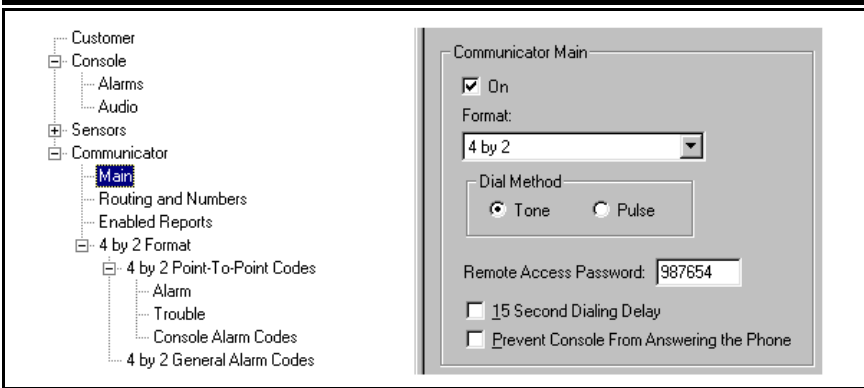
PURPOSE:

For configuring the Console's communicator format, dialing method, remote access password, dialing delay, and auto answer options.

USER RESPONSE:

COMMUNICATOR MAIN

✦ Check the ON box to enable the communicator in the Console.

☞ *NOTE: You may want to turn the communicator off while testing the system to prevent the Console from trying to dial out when it is not connected to a telephone line.*

FORMAT

✦ Select between 4 BY 2 and ADEMCO CONTACT ID for the communicator format depending on the Central Station's requirements.

DIAL METHOD

✦ Select TONE or PULSE dialing for the Console.

REMOTE ACCESS PASSWORD

✦ Enter a six-digit password. This is the password required to connect to the Console with the RA-2400 program. The default password is "987654". DO NOT FORGET THIS PASSWORD, LOCAL OR REMOTE PROGRAMMING ACCESS TO THE PERS-2400 IS IMPOSSIBLE WITHOUT IT.

15 SECOND DIALING DELAY

✦ Check this box if you want a 15 second delay before the communicator starts to dial after an alarm. This gives the subscriber time to cancel an alarm and central station report by pressing the Console's CLEAR button before the unit dials out.

PREVENT CONSOLE FROM ANSWERING THE PHONE

✦ Check this box to disable the Console's telephone ring detection feature. This keeps the Console from automatically answering the phone. Even if this box is checked, the Console can still be programmed by placing the Console into Test Mode and forcing the Console to answer by pressing the EMERGENCY button while the phone is ringing.

4.7   COMMUNICATOR ROUTING AND NUMBERS

PURPOSE:

For configuring the Console's communicator account number, trouble report routing, and telephone numbers.

USER RESPONSE:

ACCOUNT NUMBERS

✦ Enter a four digit account number for the communicator format used.

TROUBLE REPORT ROUTING

✦ Select TROUBLE REPORTS TO PRIMARY AND SECONDARY to have trouble reports routed to the primary number for five attempts, then to the secondary number for five attempts before re-trying.

✦ Select TROUBLE REPORTS ONLY TO SUPERVISORY to have trouble reports routed to the supervisory number only.

☞ NOTE: This does not effect emergency reports which are all routed to the primary or secondary telephone numbers.

PHONE NUMBERS

☞ NOTE: If no telephone numbers are entered, the Console will not report.

✦ Enter up to 20-digit telephone number(s) for the central station. Enter a "#" symbol to insert a 1-second delay. Enter a "~" symbol to insert a 5-second delay.

☞ NOTE: **DO NOT** enter any dashes or spaces into the telephone number fields.

4.8 COMMUNICATOR ENABLED REPORTS
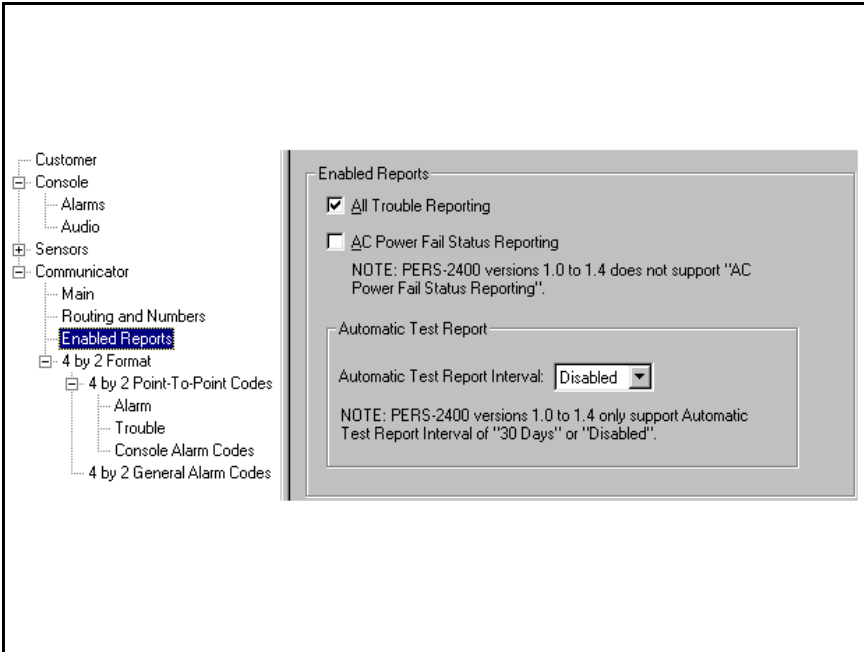
PURPOSE:

For configuring the Console's communicator status reporting options.

USER RESPONSE:

ENABLED REPORTS

✦ Check the ALL TROUBLE REPORTING box to have the Console's communicator send all status reports to the central station. These include the Console low battery, sensor supervisory, sensor low battery, and when the Activity Timer is turned on or off.

✦ Check AC POWER FAIL STATUS REPORTING if communication of loss and restoration of AC power is desired (not supported in Versions 1.0 to 1.4).

✦ Click arrow on AUTOMATIC TEST REPORT INTERVAL and select 1, 7 or 30 days if console automatic test reporting is desired (Versions 1.0 to 1.4 only support 30 days or disabled).

☞ *NOTE: The first 30-day status report will occur 30 days plus 12 hours from the time the Console is programmed.*

4.9   COMMUNICATOR 4 BY 2 FORMAT
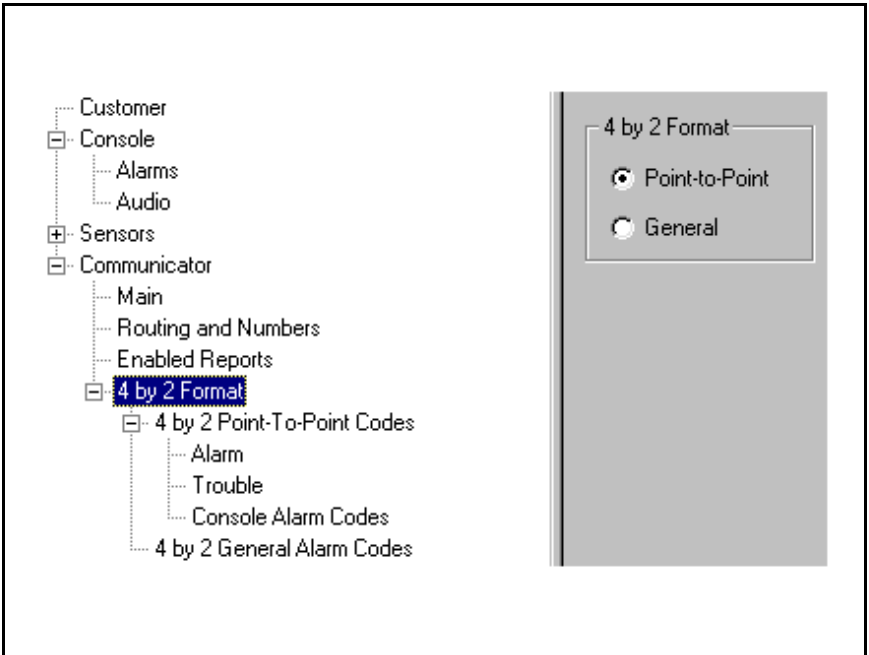
☞ NOTE: Section 4.9 pertains to the 4 by 2 communicator format only.

PURPOSE:

For configuring how the 4 by 2 format will report to the central station. General reporting or Point-to-Point reporting methods are available for the 4 by 2 format.

GENERAL REPORTING

General reporting can send three report codes for sensors: FIRE, EMERGENCY, and TROUBLE. General reporting does not indicate which sensor caused the report.

POINT-TO-POINT REPORTING

Point-to-Point reporting can send 40 report codes. Each sensor/zone has a unique ALARM code and TROUBLE code.

☞ NOTE: With either reporting method, the Console report codes are the same (see Section 4.9.3).

USER RESPONSE:

4 BY 2 FORMAT

✦ Select POINT-TO-POINT to have the Console's communicator send 4 by 2 Point-to-Point report codes.

✦ Select GENERAL to have the Console's communicator send only the three General 4 by 2 report codes.

4.9.1   4 BY 2 POINT-TO-POINT ALARM CODES

```
--- Customer
⊟-- Console
     --- Alarms
     --- Audio
⊞-- Sensors
⊟-- Communicator
     --- Main
     --- Routing and Numbers
     --- Enabled Reports
     ⊟-- 4 by 2 Format
          ⊟-- 4 by 2 Point-To-Point Codes
               --- Alarm
               --- Trouble
               --- Console Alarm Codes
          --- 4 by 2 General Alarm Codes
```

Zone Codes

1:	11	9:	19
2:	12	10:	20
3:	13	11:	21
4:	14	12:	22
5:	15	13:	23
6:	16	14:	24
7:	17	15:	25
8:	18	16:	26

PURPOSE:

To view and edit the 16 sensor/zone alarm report codes.

☞ *NOTE: 4 by 2 Point-to-Point Reporting must be selected (see Section 4.9) for these codes to report.*

USER RESPONSE:

ZONE CODES

✦ Enter a new two-digit alarm code for any sensor/zone that needs to be changed.

☞ *NOTE: Entering a "0" for an alarm code will prevent that zone from reporting.*

4.9.2　4 BY 2 POINT-TO-POINT TROUBLE CODES

PURPOSE:

To view and edit the 16 sensor/zone trouble report codes.

☞ *NOTE: 4 by 2 Point-to-Point Reporting must be selected (see Section 4.9) for these codes to report.*
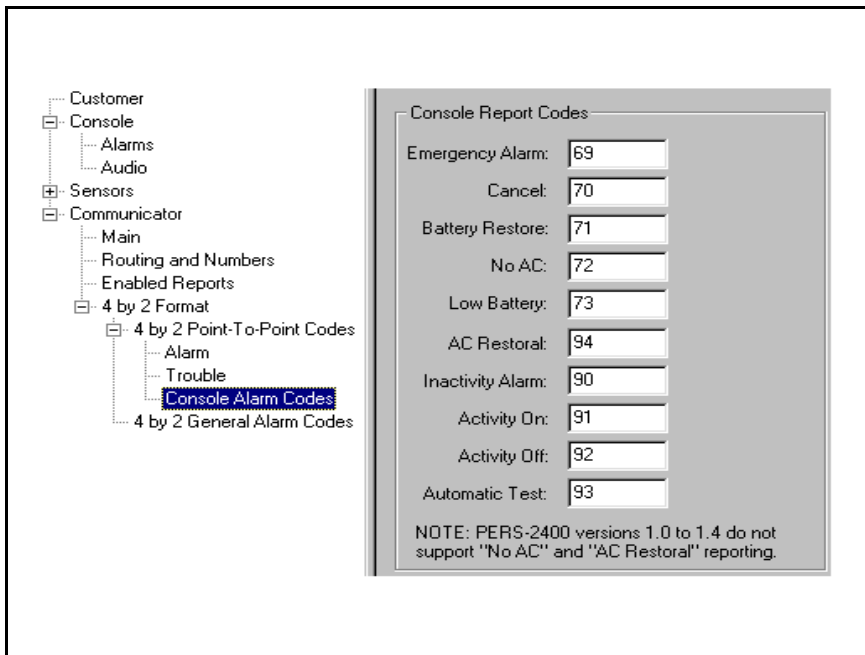
USER RESPONSE:

ZONE CODES

✦ Enter a new two-digit trouble code for any sensor/zone that needs to be changed.

☞ *NOTE: Entering a "0" for a trouble code will prevent that zone from reporting.*

4.9.3   CONSOLE REPORT CODES

PURPOSE:

To view and edit the eight Console report codes. These codes are sent for Console events such as the Console emergency button, inactivity alarm, Console low battery and battery restore, no AC and AC restoral. Activity On & Off reports occur when the Console's activity timer is turned on or off. The cancel report occurs when the Console's CLEAR button is pressed during an alarm. The Automatic Test Report occurs every 1, 7, or 30 days if the Automatic Test Report is enabled (see Section 4.8). No AC and AC restoral reporting is not supported in Versions 1.0 to 1.4.

☞ *NOTE: These report codes are sent for both 4 by 2 General and 4 by 2 Point-by-Point Reporting.*

USER RESPONSE:

CONSOLE REPORT CODES

✦ Enter a new two-digit report code for any Console event that needs to be changed.

☞ *NOTE: Entering a "0" for a report code will prevent that event from reporting.*

4.9.4   4 BY 2 GENERAL ALARM CODES
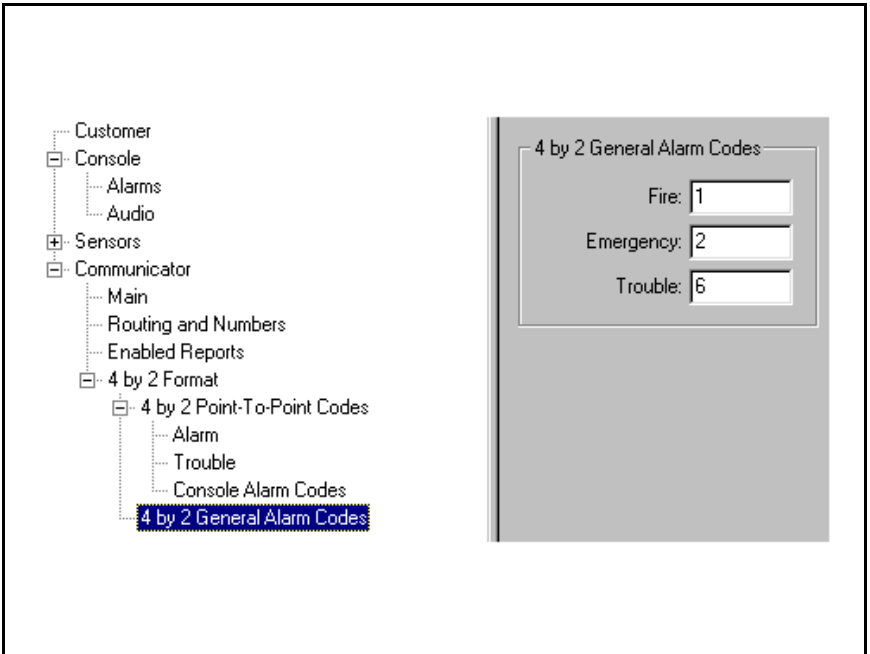
PURPOSE:

To view and edit the two general alarm codes and the general trouble code.

☞ *NOTE: 4 by 2 General Reporting must be selected (see Section 4.9) for these codes to report.*

USER RESPONSE:

4 BY 2 GENERAL ALARM CODES

✦ Enter a new one or two-digit report code for any general alarm code that needs to be changed.

☞ *NOTE: Entering a "0" for an alarm code will prevent that event from reporting.*

4.10 ADEMCO CONTACT-ID REPORT CODES

The Ademco Contact-ID reporting codes are pre-defined and cannot be changed. These reporting codes are provided as reference. The Ademco Contact-ID extended report codes indicate the sensor number that triggered the event. Console events report with a "000" extended code.

☞ *NOTE: Ademco Contact-ID Reporting must be selected for these codes to report (see Section 4.6).*

ADEMCO CONTACT-ID REPORT CODES		
EVENT	ALARM CODE	EXTENDED CODE
CONSOLE EMERGENCY	E100	000
SENSOR EMERGENCY	E101	0xx
SENSOR FIRE	E111	0xx
CANCEL	E406	000
SENSOR LOW BATTERY	E384	0xx
SENSOR STATUS TROUBLE	E381	0xx
CONSOLE LOW BATTERY	E302	000
CONSOLE BATTERY RESTORE	R302	000
INACTIVITY ALARM	E102	000
ACTIVITY ON	E372	000
ACTIVITY OFF	E371	000
1, 7, OR 30-DAY STATUS	E602	000
2-WAY AUDIO	E606	000
xx = SENSOR NUMBER IN EXTENDED REPORT		
CONSOLE NO AC	E301	000
CONSOLE AC RESTORAL	R301	000

☞ *NOTE: CONSOLE NO AC and CONSOLE AC RESORAL reporting is supported in Versions 1.0 to 1.4.*

5.   SENDING AND RECEIVING CONSOLE DATA

Sending and receiving the Account Profile data to the PERS-2400 Console is the main objective of the RA-2400 program. The Account Profiles that you create exist only on your disk drive until they are copied to a Console. The Send/Receive window controls all external communications for the RA-2400 software. It is used to select which Account Profile gets sent to, or received from, a Console in the field (accessed through remotely dialing) or connected directly to the modem (accessed through local connection).

5.1   ACCESSING THE SEND/RECEIVE WINDOW

OPEN A SAVED OR
NEW ACCOUNT
PROFILE

CLICK THE
SEND/RECEIVE
BUTTON
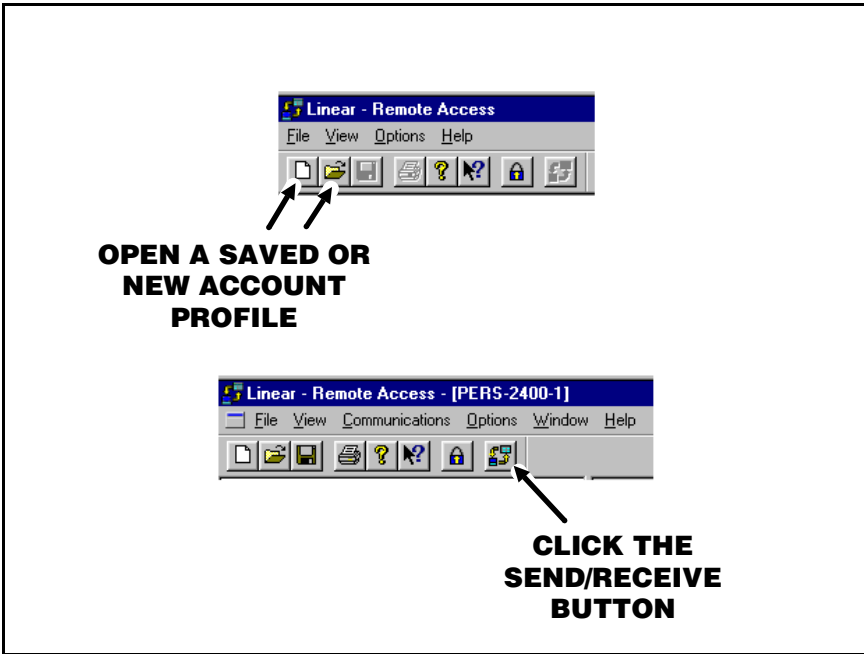
PURPOSE:

For entering data required to connect to a PERS-2400 Console and to control the connection. Monitors the status of the communication between the RA-2400 and the PERS-2400. Allows setting the Activity Timer in the Console to ON or OFF.

USER RESPONSE:

✦ An Account Profile file must be open before the Send/Receive window can be accessed. Use the OPEN... or NEW command in the FILE menu or on the toolbar to load an Account Profile into the workspace.

✦ From the COMMUNICATIONS menu, choose SEND/RECEIVE..., or click on the SEND/RECEIVE button on the toolbar.

☞ *NOTE: If you are opening a template created by RA-2400 Versions 1.0 to 1.7 you may get a dialog box saying that RA-2400 has detected an older version template. Click YES and RA-2400 will convert the template to the current format and it will appear on your desktop ready for use. The old template will be saved as a backup file in its original format.*

5.2   CHOOSING AN ACCOUNT PROFILE

CHOOSE ACCOUNT PROFILE
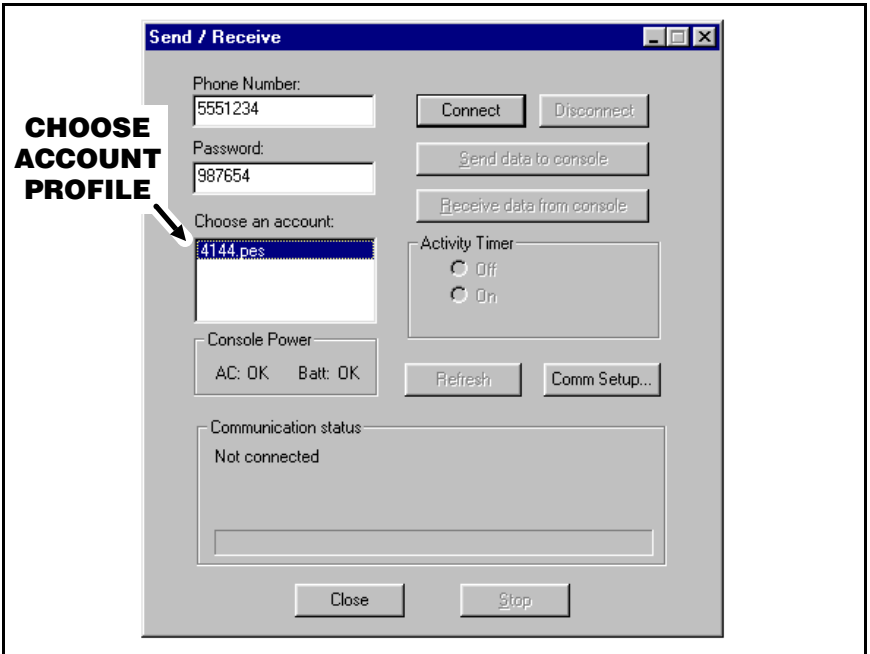
PURPOSE:

For selecting which Account Profile open in the workspace will be used when connecting to a Console. The Account Profile selected automatically fills in the Console's Phone Number and Password Fields using information already entered in the profile (see Section 2.4).

USER RESPONSE:

CHOOSE AN ACCOUNT

✦ Click on the desired Account Profile for the Console that is going to be programmed. The installation telephone number and Console password should appear in the boxes.

☞ *NOTE: ARMING MODE will change to ACTIVITY TIMER after a PERS-2400 Account Profile is selected.*

5.3   CONNECTING TO A CONSOLE
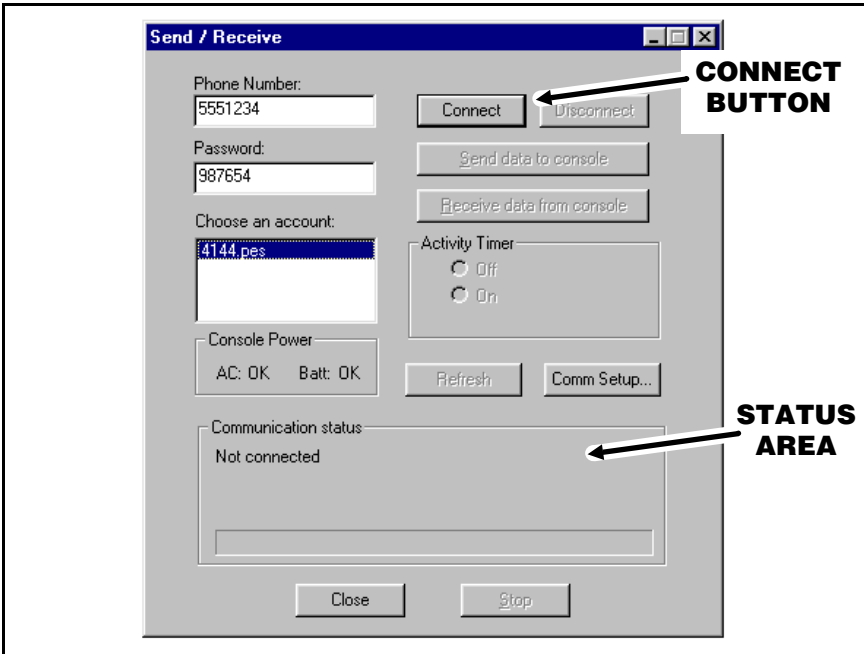
PURPOSE:

Causes the RA-2400 to connect to the PERS-2400 Console. The RA-2400 will try to connect to the Console either locally or remotely, depending on the Communications Setup (see Section 3.3).

☞ *NOTE: The Communications Setup can be reviewed by pressing the COMM SETUP... button in the Send/Receive window.*

USER RESPONSE:

☞ *NOTE: Before connecting to a Console, it is recommended that all of the sensors used in the system be entered into the Console's memory. This will prevent having to connect to the Console again after programming if modification of the sensor options is required.*

BEFORE CONNECTING

✦ Be sure the computer's modem is powered on, connected, and tested as described in Section 1.5 of this manual.

✦ Check that the Console is powered on.

✦ Be sure that the Account Profile you want to associate with the particular Console is selected in the "Choose an Account" box.

5.3   CONNECTING TO A CONSOLE (CONTINUED)

CONNECTING LOCALLY

✦ Verify that the modem's LINE jack is connected to the Console's LINE jack with a double-ended modular telephone cable.

✦ Verify that the Console is in TEST MODE (press the test button to set the Console into Test Mode).

✦ Click the CONNECT button. The Communication Status area will show the progress of the connection. WAIT UNTIL THE TIMEOUT TIMER BEGINS TO COUNT DOWN BEFORE PROCEEDING.

✦ As the timeout timer counts down, PRESS THE EMERGENCY BUTTON ON THE CONSOLE.

CONNECTING REMOTELY

✦ Be sure that the modem's LINE jack is connected to a working telephone line.

✦ Verify that the Console's LINE jack is connected to a working telephone line.

✦ Click the CONNECT button. The Communications Status area will show the progress of the connection. WAIT FOR THE CONNECTION TO COMPLETE. The RA-2400 will dial the number once, wait for a few rings, hang-up, then dial a second time. The Console should answer the telephone immediately when the telephone rings during the second dialing attempt.

After connecting the Communications Status area will show the progress of the on-line connection, then display "Connected" and the Personal Emergency System version number.

The Console Power area will show the status of the Console's AC power and backup battery. Pressing the REFRESH button will update the displayed information and display the console version number.

Local Connection in Progress   *Remote Connection in Progress*
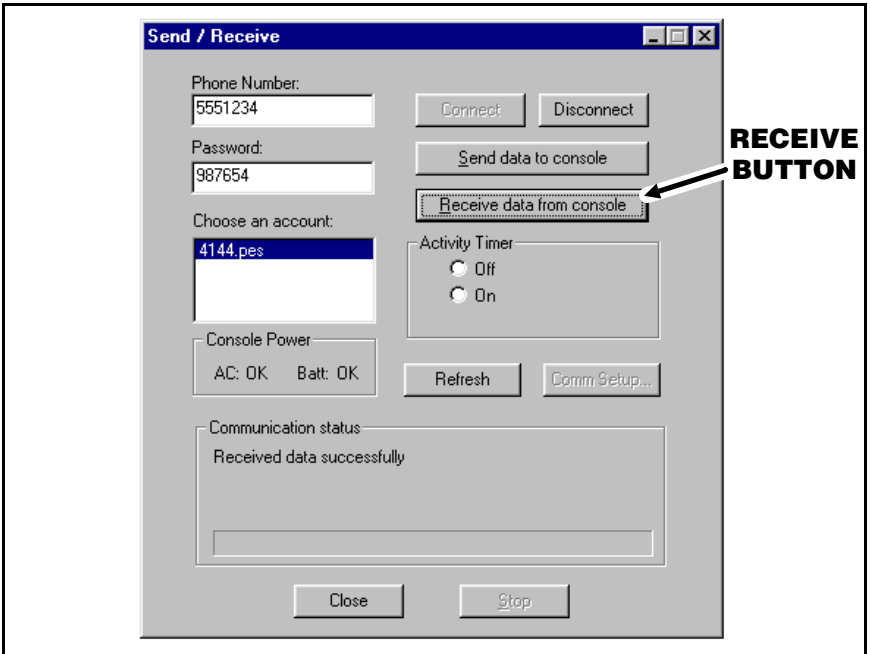
5.4   SENDING AND RECEIVING DATA
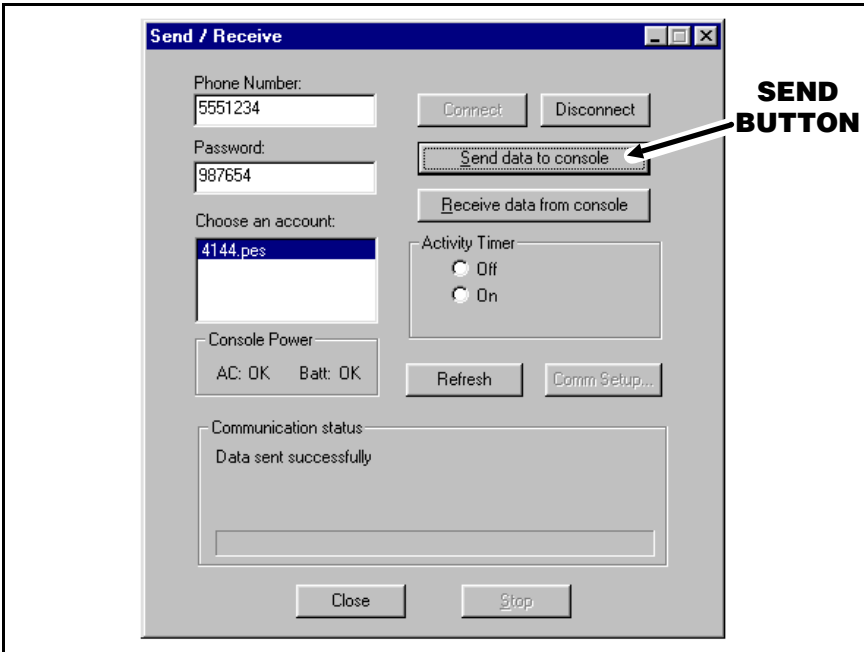
PURPOSE:

For transferring data between an Account Profile and a PERS-2400 Console. Also used to monitor Console power and control Activity Timer status.

☞ *CAUTION: Receiving the data from the Console will overwrite the data in the Account Profile. If you have made changes to the Account Profile, save the profile, then send the profile to the Console before receiving the data into the profile. A warning will be displayed when sending to a Console before receiving. Click OK. This leaves previously learned sensor information unchanged. If this is a new Account Profile, its OK to receive the Console data into the new profile.*

USER RESPONSE:

SENDING

✦ Click the SEND DATA TO CONSOLE button. The Communications Status area will indicate the progress and show if the data was sent to the Console successfully.

☞ *NOTE: A warning will be displayed noting that the sensor information will not be sent if the data has not been received from the Console first, during this connection. Check the DO NOT SHOW THIS MESSAGE AGAIN box if you do not want this warning to appear again during this programming session.*

Send / Receive

Phone Number:
5551234

Password:
987654

Choose an account:
4144.pes

Console Power
AC: OK   Batt: OK

Communication status
Received data successfully

Connect   Disconnect

Send data to console

Receive data from console

Activity Timer
○ Off
○ On

Refresh   Comm Setup...

Close   Stop

RECEIVE BUTTON

RECEIVING

✦ Click the RECEIVE DATA FROM CONSOLE button. The Communications Status area will indicate the progress and show if the data was received from the Console successfully.

☞ *CAUTION: Receiving the data from the Console will overwrite the data in the Account Profile.*

SPECIAL NOTES:

You can make changes to the Account Profile while the Console is connected. Be sure to send any changes to the Console before disconnecting. Minimize the Send/Receive window or slide it out of the way before editing the Account Profile. There is a time limit to the connection. The Console will automatically disconnect after three minutes of inactivity.

ACTIVITY TIMER

✦ The Console's Activity Timer can be switched ON or OFF while the Console is connected. Click the ACTIVITY TIMER ON or OFF button to control the timer. If the Activity Timer is disabled (see Section 4.3) this function is inoperative.

DISCONNECTING

✦ When finished communicating with the Console, click on the DISCONNECT button. The Communications Status area will show "Not Connected" when the Console has been disconnected.

5.5   CLOSING RA-2400
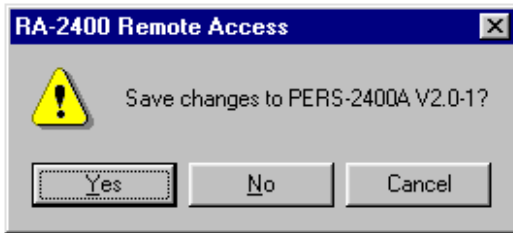
PURPOSE:
> To save the active Account Profile(s) and quit the RA-2400 program.

USER RESPONSE:

> ✦ From the FILE menu, choose EXIT.

> ✦ To save while exiting In the "SAVE CHANGES?" window click YES.

> If the active Account Profile is the default template, select a location and new name for the .P20 file and click SAVE.

> If the active Account Profile already has a custom file name, it will be saved with the same name.

> ☞ *NOTE: If more than one Account Profile template is open and has been changed, additional "SAVE CHANGES?" windows will appear.*

IMPORTANT:
> **AFTER ANY PROGRAMMING CHANGES ARE MADE TO A CONSOLE, PERFORM THOROUGH TESTING TO VERIFY THAT THE CONSOLE OPERATES AS INTENDED.**