PC30A Software

Version 3.0*

For HME System 30

Installation and Operating Instructions

HM ELECTRONICS, INC.
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**Table of Contents**

**SECTION 1. INTRODUCTION**
1.1 PC30A DESCRIPTION ................................................................. 1
1.2 PC30A BASICS ............................................................................. 2
1.3 PC30A FEATURES ........................................................................ 3
   1.3.1 What PC30A Can Do ............................................................ 3
   1.3.2 What PC30A Does Not Do .................................................... 3
1.4 TECHNICAL SUPPORT .............................................................. 3

**SECTION 2. INSTALLATION**
2.1 CONNECTION TYPES ............................................................... 4
   2.1.1 Network (Ethernet) Cable Connections for a Network-enabled System 30 Timer ... 4
2.1.2 Direct Serial Cable Connection .............................................. 5
2.1.3 Remote Modem Cable Connections from a Computer to an External Modem ............ 7
2.1.4 Remote Modem Connection from a System 30 Timer to an External Modem .......... 9
2.1.5 Recommended External Modems to Connect to a System 30 Timer ....................... 11
2.1.6 Recommended Modems to use with the Computer ................................. 11
2.1.7 Optional ComSwitch Installation and Operation ......................................... 11
2.2 PC30A SOFTWARE INSTALLATION ....................................... 12

**SECTION 3. OPERATION**
3.1 STARTING PC30A .................................................................... 17
3.2 AUTHORIZING PC30A .............................................................. 17
3.3 RUNNING PC30A FOR THE FIRST TIME ............................... 18
3.4 UNDERSTANDING THE MAIN SCREEN ..................................... 20
3.5 GETTING STARTED .................................................................. 21
3.6 USING THE MENUS ................................................................ 22
   3.6.1 File Menu ........................................................................... 22
   3.6.2 Edit Menu .......................................................................... 28
   3.6.3 View Menu ......................................................................... 49
3.6.4 Store Menu .......................................................................... 50
3.6.5 Reports Menu ....................................................................... 56
3.6.6 Scheduler Menu ..................................................................... 72
3.6.7 Help Menu ........................................................................... 80
3.7 PC30A ADVANCED TOPICS .................................................. 81
   3.7.1 Configuring PC30A for Distributed Use .................................. 81
   3.7.2 Importing and Exporting Raw Car Data Files .......................... 83
   3.7.3 Maintaining Your Database ............................................ 86
3.8 PC30A ERROR CODES ........................................................... 90

**IMPORTANT**
Please check the front cover of this manual to ensure that it pertains to the version of HME equipment or software application in use. If not, you can obtain the appropriate manual in .pdf format from the HME website at www.hme.com.

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# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Typical PC30A equipment configuration</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Computer connected directly to a network-enabled System 30 Timer</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Computer connected via hub/switch or router to a network-enabled System 30 Timer</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>RS-232 cable pin connections (PC to a System 30 Timer)</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>PC to System 30 Timer Direct Serial cable connections</td>
<td>6</td>
</tr>
<tr>
<td>6.</td>
<td>RS-232 cable pin connections (PC to external modem)</td>
<td>7</td>
</tr>
<tr>
<td>7.</td>
<td>PC and external modem cable connections</td>
<td>8</td>
</tr>
<tr>
<td>8.</td>
<td>RS-232 cable pin connections (System 30 Timer to an external modem)</td>
<td>9</td>
</tr>
<tr>
<td>9.</td>
<td>Not using the optional ComSwitch</td>
<td>10</td>
</tr>
<tr>
<td>10.</td>
<td>Using the optional ComSwitch</td>
<td>10</td>
</tr>
<tr>
<td>11.</td>
<td>Typical PC30A distributed-use configuration</td>
<td>81</td>
</tr>
</tbody>
</table>
1.1 PC30A DESCRIPTION

PC30A is a PC application which provides you, the user of System 30 Timers, with convenient and powerful data control and reporting capabilities. You are a typical user of PC30A if you are a Store Manager, a Franchise Store Owner, or a Corporation seeking to manage one or more stores based on data provided by the System 30 Timer and reported by PC30A.

PC30A allows you to analyze performance in one or more stores to determine what management action can be taken to optimize store operations.

! PC30A is a database application able to acquire large amounts of data from individual System 30 Timers and store it in a central Personal Computer.
! PC30A can generate reports summarizing the data in printed or computer file format.
! PC30A provides you the ability to manually connect to particular store timers and acquire timer-generated reports.
! PC30A is also an automatic scheduler that can poll for data from one or more store timers and create database-reports within a configurable and flexible time period.
! PC30A is a settings editor, giving you the ability to remotely view and change store timer settings.
! PC30A allows you to connect to local timers via a direct serial connection or remote timers via a network (TCP/IP) or a modem connection.

These instructions provide information necessary for installation and initial setup of the PC30A program.

Minimum Requirements for Use of PC30A Software

- IBM compatible PC with a Pentium™ microprocessor
- Minimum of 32 megabytes RAM
- Minimum of 100 megabytes available hard disk space
- One available Ethernet port, a modem interface or an RS-232 serial port
- Serial interface cable or CAT 5e Network cable appropriate for your PC (See Section 2.1)
- System 30 Timer with firmware version A.2.1* or later
- Microsoft Windows™ 95, Windows™ 98, Windows™ NT4.0 Service Pack 3 or later, Windows™ 2000, Windows™ XP or Windows™ ME
- Internet Explorer 4.1 or higher
1.2 PC30A BASICS

PC30A is a system for data collection, archiving and reporting from one or more System 30 Timers. It is a database application designed to help you keep track of trends and activities in the store’s drive-thru lanes and to make decisions about store operations.

Once installed, PC30A acts as the central data organizer. You can program PC30A to call/connect to one or more store timers and collect their Raw Car Data (RCD) on a scheduled basis. You can also manually collect RCD by connecting PC30A to any store you have entered into its store list. The RCD collected by PC30A will be added to the active database, which can grow to a maximum of 980 megabytes of stored data.

You can also use PC30A to obtain printed reports from the connected store timer, formatted exactly as they would be printed at the timer’s printer. After RCD has been collected from a store, you can request reports to be printed or saved to file for specific dates and times, or on a scheduled basis. PC30A provides a large number of reporting functions, including predefined summary reports of drive-thru performance.

The PC30A can also be used to view and modify store timer settings, thus controlling how the timer is set up, as if you were viewing the timer menus.

The PC30A can be used to monitor individual cars as they leave the store’s drive-thru lanes.
1.3 PC30A FEATURES
The PC30A application provides the following major features listed below.

1.3.1 What PC30A Can Do

- Connect to one or more remote HME System 30 Timer (via Network, using TCP/IP).
- Connect to only one local HME System 30 Timer (via serial port).
- Connect to one or more remote HME System 30 Timer (via modem).
- Store large amounts of car data on a scheduled and on-demand basis for one or more store timers.
- Acquire Timer-Generated Summary Reports from manually connected timers.
- Generate Scheduled or On-Demand Summary Reports from the Database of Raw Car Data that it has collected.
- Can generate customized Summary Reports from the database including Inactivity, Excess Time and Comparison Summary Reports.
- Can acquire Timer-Generated Settings Reports that allow you to see how a given timer is configured.
- Can generate Database-Derived Settings Reports.
- Can create scheduled Database-Derived Summary Reports for various periods of time.
- Can change/display settings for remote or local store timers.
- Can monitor drive-thru activity as cars pass through the lane.

Use the Getting Started section for instructions on how to start using these features.

1.3.2 What PC30A Does Not Do

PC30A does not generate graphs of summary data; however, it provides Raw Car Data and System 30 Timer Settings in a generic data format that can be used by other software to produce graphs.

1.4 TECHNICAL SUPPORT
For authorization to use this product, or for technical assistance, call HME Customer Support at 1-800-848-4468 or Fax 858-552-0172 (Attn: Customer Support).
2.1 CONNECTION TYPES
The cables mentioned below can be obtained from a computer hardware dealer or can be ordered by calling the HME Sales Department at (858) 535-6060. HME cables are available in 10 ft. (3.05 meter) and 100 ft. (30.48 meter) lengths.

2.1.1 Network (Ethernet) Cable Connections for a Network-enabled System 30 Timer
Depending on your local network configuration, connect the network-enabled System 30 Timer to your network according to one of the following examples.

1. **Direct Network Connection**
   If you do not have any connections to your computer’s network connector, you can connect the computer directly to the network-enabled System 30 Timer using a cross-over Ethernet cable as shown in Figure 2.

   ![Figure 2. Computer connected directly to a network-enabled System 30 Timer](image)

2. **Indirect Network Connection**
   If you already have a connection between your computer’s network connector and other network devices, such as a hub/switch or router, you can connect the network-enabled System 30 Timer to the same hub/switch or router using a standard straight-through Ethernet cable as shown in Figure 3.

   ![Figure 3. Computer connected via hub/switch or router to a network-enabled System 30 Timer](image)
2.1.2 Direct Serial Cable Connection

An RS-232 serial interface cable can be used to connect the computer (PC) to a System 30 Timer. It must have a standard 9-pin female "D" connector at the timer end, and a 9-pin or 25-pin female "D" connector at the computer’s end (depending on whether a 9-pin or 25-pin serial input connector is available on your PC).

! It must be shielded to prevent interference.
! Maximum cable length should not exceed 150 ft. (45.72 meters) for reliable communication.
! It must be a crossover (null modem) cable (See diagram below).
! Pin connections for the cable wires must be as shown in Figure 4.

![Crossover Cable Diagram]

Figure 4. RS-232 cable pin connections (PC to a System 30 Timer)
Connect the cable directly from the computer to the timer unit as follows. Refer to Figure 5.

! Plug the 9-pin female connector on the interface cable into the connector on the bottom of the System 30 Timer. Tighten the screws to secure the connector to the unit.

! Plug the female 9-pin or 25-pin connector on the other end of the interface cable into the serial port connector on the back of the PC.

**NOTE:** Be certain you have the correct interface cable for your PC. Some PC's have either two 25-pin connectors or two 9-pin connectors, and some have one of each.

---

**Figure 5.** PC to System 30 Timer Direct Serial cable connections
2.1.3 Remote Modem Cable Connections from a Computer to an External Modem

If an external modem is used, an RS-232 serial interface cable must be used to connect the computer (PC) to the modem. It must have a standard 9-pin female "D" connector at the computer end, and a 25-pin male "D" connector at the modem end.

- It must be shielded to prevent interference.
- Maximum cable length should not exceed 150 ft. (45.72 meters) for reliable communication.
- It must be a straight-thru serial cable.
- Pin connections for the cable wires must be as shown in Figure 6.

![Figure 6. RS-232 cable pin connections (PC to external modem)]
If an external modem will be used, connect the cable directly from the computer to the modem as follows. Refer to the top part of Figure 7.

! Plug the 25-pin male connector on the interface cable into the connector on the modem. Tighten the screws to secure the connector to the unit.

! Plug the female 9-pin or 25-pin connector on the other end of the interface cable into the serial port connector on the back of the PC.

**NOTE:** Be certain you have the correct interface cable for your PC. Some PC’s have two 25-pin connectors or two 9-pin connectors, and some have one of each.

! Connect the standard telephone cables to the modem as shown in the top part of Figure 7.

---

**Connections for PC with External Modem**

![Diagram of PC with External Modem](image)

**Connections for PC with Internal Modem**

![Diagram of PC with Internal Modem](image)

**Figure 7. PC and external modem cable connections**

If the computer has an internal modem, connect the standard telephone cables directly to the computer as shown in the bottom part of Figure 7.
2.1.4 Remote Modem Connection from a System 30 Timer to an External Modem

An RS-232 serial interface cable must be used to connect the System 30 Timer to the modem. It must have a standard 9-pin female "D" connector at the timer end, and a 25-pin male "D" connector at the modem end, as shown in Figure 8.

- It must be shielded to prevent interference.
- Maximum cable length should not exceed 150 ft. (45.72 meters) for reliable communication.
- It must be a straight-thru modem cable.
- Pin connections for the cable wires must be as shown in Figure 8.

![Figure 8. RS-232 cable pin connections (System 30 Timer to an External Modem)](image)

Connect the System 30 Timer to the modem as shown in Figure 9. Note the two different configuration possibilities, depending on whether or not the optional ComSwitch will be used.

**NOTE:** If the telephone handset is picked up while the modem is in use, the connection will fail. HME therefore provides an optional ComSwitch, which allows the phone line from the wall jack to be shared between the telephone and the modem so they do not interfere with each other. If you pick up the telephone handset to make a call while the modem is in use, you will get a busy signal. Figure 9 and 10 show how to connect the ComSwitch to the modem, telephone, and line from the wall jack.

If the optional **ComSwitch will not be used**, connect the cables as follows. Refer to Figure 9.

- Plug the 9-pin female connector on one end of the interface cable into the connector on the bottom of the System 30 Timer, and plug the 25-pin male connector on the other end of the cable into the connector on the modem. Tighten the screws to secure the connectors to the units.
- Connect a standard telephone cable from a telephone to the modem, and another from the modem to a telephone wall jack.
If the optional **ComSwitch will be used**, connect the cables as follows. Refer to Figure 10.

1. Plug the 9-pin female connector on one end of the interface cable into the connector on the bottom of the System 30 Timer, and plug the 25-pin male connector on the other end of the cable into the connector on the modem. Tighten the screws to secure the connectors to the units.

2. Connect a standard telephone cable from a modem to the ComSwitch Fax/Modem input, and another from the ComSwitch Line In input to a telephone wall jack.

3. Connect a standard telephone cable from a telephone to the ComSwitch phone input.
2.1.5 **Recommended External Modems to Connect to a System 30 Timer**

The only external modems recommended for connection to the System 30 Timer are the US Robotics Sportster 14400, 28800, 33600 or 56K Faxmodems. If any other modem is used, be certain it is Hayes-compatible and meets the requirements below.

All modems connected to the System 30 Timer must be able to permanently save the following parameters (via DIP switches or nonvolatile memory), so they are retained after the modem is powered down:

- Auto Answer Only Mode
- Transmit and Receive at 9600 Baud only
- No Parity
- 8 data bits
- 1 stop bit
- Hardware (RTS/CTS) Handshake
- Local Echo off

2.1.6 **Recommended Modems to use with the Computer**

The following internal/external modems are recommended for use with the Computer (PC) that will attempt to make a Remote Modem connection with a System 30 Timer. If a modem other than those listed below is used, be certain it is Hayes-compatible.

- US Robotics Sportster 56K Faxmodem
- US Robotics Sportster 28,800 Faxmodem
- US Robotics Sportster 33,600 Faxmodem
- Aspen 14,400 Data Fax Modem
- Megahertz XJ1144/XJ2144 (14, 400 Modem)

All modems connected to the PC must meet the following standards/settings:

- Transmit and Receive at a minimum of 9600 Baud
- No Parity
- 8 data bits
- 1 stop bit
- Hardware (RTS/CTS) Handshake

2.1.7 **Optional ComSwitch Installation and Operation**

Refer to the ComSwitch Operator’s Guide for further instructions on how to install, operate and maintain the ComSwitch product. After you install the ComSwitch, you MUST reset the switch with the following procedure:

- Take the phone off the PHONE port off-hook.
- Press # 999(three beeps will be heard).
- Hang up the phone.
2.2 **PC30A SOFTWARE INSTALLATION**

**NOTE:** Before installing PC30A, close all other software that is open.

To install PC30A under Windows® 95, Windows® 98, Windows® NT4.0 Service Pack 3, Windows® 2000/XP or Windows® ME, follow the instructions below.

<table>
<thead>
<tr>
<th>To install PC30A for Windows NT/2000/XP, you must be a System Administrator. For Windows NT/2000/XP, if you have installed this product for multiple users, you may give authorization to all PC30A users at once. To do this, log into the computer as System Administrator and install PC30A according to these instructions. After successful installation, all users will have access to PC30A. To be able to run PC30A, each user must have “Read, Write and Execute” permission for the ProgramFiles\HME\PC30A directory.</th>
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</thead>
</table>

1. Insert the CD into a selected CD-ROM drive.
   - If the CD-ROM drive is set for AutoPlay, the PC30A installation will begin automatically and the screen below will appear.
   - Skip steps 2 and 3.
   - If the CD-ROM drive is not set for AutoPlay, continue with the following steps.

2. Under Windows Explorer or File Manager, double click on the CD-ROM drive where the CD is inserted.

3. Double click on the **setup.exe** file, and the screen below will appear.

4. Select **Next** to continue.
5. Please read all of the license agreement carefully.

! If you do not agree to comply with the license agreement, select I do not accept..., and the PC30A software installation will stop.

! If the license agreement is acceptable, select I accept..., then select Next>.

Enter the appropriate information under User Name and Organization, and select Next>.

NOTE: For Windows NT/2000/XP, you will also have the following selections.

Install this application for:

! Anyone who uses this computer (all users)
! Only for me (user’s name)
To change the destination folder where PC30A software files will be installed on your computer, select the **Change** button to assign a different location, then select **Next >**.

8. Select Manual Startup or Auto Startup, then select **Next >**.
9. Read the information on the screen. If the Folder shown is acceptable, select **Install**.

10. Please wait while PC30A software is installed. If you would like to stop the installation at any time, select **Cancel**.
11. Your PC30A software installation has been completed. Select **Finish** to close the Installation Wizard.

To uninstall PC30A anytime:

To uninstall PC30A software from your computer, complete the steps below.

! Double click on the **My Computer** icon on your main computer screen.

! Double click on the **Control Panel** icon.

! Double click on the **Add/Remove Programs** icon.

! Select **PC30A** and click on the **Add/Remove bar**.

! Select **Yes** to the question “Are you sure you want to uninstall this product.”

! Select **OK**.

! When the PC30A software removal has finished, restart the computer.
3.1 STARTING PC30A

From the Desktop (or from Start->Programs->HME->PC30A), click on the PC30A shortcut to start the PC30A Application.

3.2 AUTHORIZING PC30A

When the following screen comes up, call HME Customer Support at 1-800-848-4468 for an authorization code.

Please have the Serial Number of the PC30A (attached to the envelope containing the PC30A CD) ready when you call HME Customer Service.
3.3 RUNNING PC30A FOR THE FIRST TIME

After you successfully authorize PC30A, it will start running and performing initialization of the Raw Car Data database. You will see the following screen:

You will then see the following status on the screen, indicating a new database is being created. This status will no longer appear the next time you run PC30A.

Finally, you will see a dialog box indicating that PC30A is searching for valid direct serial Com and modem ports. PC30A will attempt to automatically assign the first direct serial Com and modem port it finds for use in connecting to store timers. Please note that Network connections to network-enabled System 30 Timers do not use these ports.
NOTE: PC30A may take several minutes to search for Modem and Com Ports.

In the rare case that the PC30A database has been deleted and the database backup is missing, the following screen will be displayed to inform you that PC30A can no longer run.
3.4 UNDERSTANDING THE MAIN SCREEN

The PC30A main screen appears after the PC30A Interface Program has been opened and has initialized the database. The main screen has various controls that allow you to perform all PC30A operations by accessing its functions and features including menus, task bar buttons, a report viewer, a report control bar, a status line and an error line.
3.5 GETTING STARTED

When starting PC30A for the first time, it is important to understand basic PC30A operations by completing the steps below. These steps cover basic functions that you should practice and become familiar with before attempting more advanced operations.

! The First Time you run PC30A – PC30A authorization (Pages 18 - 20)
! Learn the Menu Bar – become acquainted with the menu system (Pages 23 - 28)
! Edit Options – change settings for Raw Car Data (RCD) scheduling and direct serial Com and modem ports (Pages 30 – 34)
! Add store(s) – add a new store to a list of stores in the database (Page 35)
! Connect store – connect to a store timer from the list of stores (Pages 50 - 51)
! Get On-Demand Reports – print/view summary and settings reports from store timer and database (Pages 56 – 71)
! Disconnect from store – disconnect from a connected store (Page 52)
! Schedule report types and times – select summary reports to be printed and/or saved to file on a timed basis (Pages 72 – 79)

New Features Shortcuts

Here are some additional “getting started” steps that will allow you to explore new features provided by this version of PC30A.

! Viewing and editing settings – learn how to change System 30 Timer settings remotely (Pages 41 - 48)
! Monitoring car activity at a store timer – learn how to connect to a store timer and view the operation of the store’s drive-thru lane (Pages 54 – 55)
! Getting customized reports – learn how to obtain elaborate reports that provide you with statistics about how your store is performing, including excess time, inactivity, and on-demand comparison summary (Pages 67 – 68)
! Editing comparison summary reports schedule – learn how to set up the scheduling of the powerful comparison summary report. This report allows you to see how multiple stores are performing in a side-by-side comparison (Pages 39 – 40)

NOTE: All date and time controls may look different if the country locale is not English (United States). You can customize their appearance by going to Control Panel/Regional Settings. Time and Date Tabs have pull-down menus.
3.6 USING THE MENUS

All of the features of PC30A can be accessed from the Menu Bar. The Menu Bar contains major categories of PC30A operations from which you can access pull down menus, containing specific functions. The Menu Bar shown below appears near the top, left corner of the PC30A main screen.

To view drop-down menus from the Menu Bar:

! Place your cursor on any menu-bar item (such as File, Edit, View, etc.) and click for its drop-down menu to appear, or...

! Hold down the Alt button on your keyboard and press the key of the letter that is underlined on the desired menu-bar item.

3.6.1 File Menu

The File menu is used for operations involving PC30A database, timer settings and reports. The menu gives choices to Create an Archive of the database, to Compact and Repair the database, and to Export Raw Car Data from the database to a text file or Import a raw car data text file into the database. In addition, the File menu is used to Print and Export the timer reports, and to Exit PC30A.

Select File on the Menu Bar to view the drop-down File menu.

! Select Active Database on the File menu to view the Create Archive and Compact and Repair dialog box.

! Select Raw Car Data on the File menu to view the Import from text file and Export to text file dialog box.

! Select Reports on the File menu to view the Export and Print dialog box.

! Select Exit on the File menu to close/exit the PC30A software program.
Archiving and Compacting Active Database Files

See PC30A Advanced Topics: Maintaining your Database.

Importing and Exporting Raw Car Data

The PC30A is able to import RCD from two sources:
1. Store Timers
2. Text Files

PC30A Basics (Page 2) describes how the PC30A collects data from Store Timers. Another approach is discussed in PC30A Advanced Topics: Configuring PC30A for Distributed Use (Page 81), for collecting RCD from multiple groupings of stores without having to collect the data directly from each store.

PC30A is also able to export RCD to a Tab or Comma-delimited text file for use in 3rd party applications such as spreadsheets, etc.

Raw Car Data

The Raw Car Data menu opens another menu with 2 choices:

Import from text file …

The Import from text file… menu opens the Import RCD Text File into Active Database dialog box, which is used to import the Raw Car Data text delimited files and settings files into the PC30A Database. This feature is used for the PC30A configurations in which data can be collected from several timers by more than one PC30A, then manually imported to one central PC30A’s Database.
The **Import RCD Text File into Active Database** dialog box is used to select a store, from which the Raw Car Data will be imported, and the Raw Car Data text file to be imported. PC30A will import Raw Car Data and save it under the Store ID that is found in the text file. If the Store ID does not already exist in the Database, these records will not appear in any reports, even though they have been imported. Each Store ID in the Store List must match the Store IDs of the timer where Raw Car Data is being acquired. PC30A will import only those Raw Car Data records that match the store ID selected on the grid. PC30A will not import records that already exist in the database.

The Stores grid in the dialog box is used to select the store for which the Raw Car Data will be imported. The store can be selected with a mouse click on the row containing the store, or using Up/Down keys of the keypad.

The **Select File** button is used to select the text file to be imported. Selecting the **Select File** button opens a standard windows **File Open** dialog box, which allows selecting the directory and the file name of the Raw Car Data text file. After the file has been selected, a path and file name are displayed above the Status Bar.

The **Import** button is used to start the import process. Selecting the **Import** button will activate the Progress Bar at the bottom of the dialog box. The Progress Bar indicates the PC30A is busy importing data, but does not show the overall percentage of the completed task.

After the entire file has been read and appropriate data records have been imported, the number of records imported will be shown above the Status Bar.

The **Close** button is used to close the dialog box. Selecting the **Close** button will abort any import in progress.

**NOTE:** In the PC30A Database, a unique Raw Car Data record is defined by Store ID, lane number of the event, and event time.

**NOTE:** each unique RCD record imported into the Active Database is inserted in sorted order.

**Export to text file …**

The **Export to text file**… menu opens the **Export RCD into Text File** dialog box, which allows you to export the Raw Car Data into text-delimited file. This feature is used for the PC30A configurations in which different PC30A installations share data.
The Export RCD into Text File dialog box is used to select a store, whose Raw Car Data will be exported. PC30A will export only those Raw Car Data records that match the Store ID selected on the grid, and that lie within the Start - Stop range selected on the dialog box.

**NOTE:** For PC30As used in a Distributed Configuration, settings files must be transferred together with the exported file. Without the settings files, PC30As will not be able to import Raw Car Data text files.

The Stores grid shows the Store ID, Store Name and the type of Connection to that store’s timer. The store whose Raw Car Data will be exported can be selected with a mouse click on the row of the grid containing that store, or by using the up and down arrow keys of the keypad.

The Date and Time settings are used to limit the time range of the Raw Car Data to be exported. Changing the Start or Stop dates and times will affect how many records are exported to the text file.

The Tab and Comma selections in the dialog box allow you to select the text file format. Selecting Tab will format the Raw Car Data text file with columns separated by tabs, whereas selecting Comma will separate the data columns with commas.

The Select File button is used to select the text file to be exported. The Select File button opens a standard Windows File Save dialog box, which allows selecting the directory and the file name of the Raw Car Data text file. After the file has been selected, a path and file name will be displayed above the Status Bar.

By pressing the Export button, you can start the export process. The Export button will activate the Progress Bar at the bottom of the dialog box. The Progress Bar indicates the PC30A is busy exporting data, but does not show the overall percentage of the completed task.

After the entire file has been written and appropriate records have been exported, the dialog box will show the number of records exported above the Status Bar.

The Close button is used to close the dialog box. Selecting the Close button will abort any export in progress.
Exporting and Printing Report Files

Once you create a Summary or Settings report, PC30A gives you the ability to save the report into alternative data file formats. In addition, you can print reports to a default printer exactly as they are displayed in the report viewer.

Reports

The Reports menu opens another menu with the following two choices, which deal with reports currently displayed on the screen.

Export …

The Export menu opens the Export dialog box, used to export the report currently displayed on the screen into a file that can be opened with another software application, such as a word processor to create a document or a spreadsheet application to graph the data.

The Export dialog box can export to various formats:

- Adobe Acrobat
- Character Separated Values
- Tab Separated Values
- Crystal Reports
- Data Interchange Format
- Excel
- HTML
- Lotus
- Paginated Text
- Record Style (Columns of values)
- Rich Text Format
- Tab Separated Text
- Tab Separated Values
- Text
- Word for Windows
The **Print** menu opens the standard windows **Print** dialog box, used to print the report currently displayed on the screen to a default printer. The **Print** dialog box offers various options for printing a report.

![Print dialog box](image)

The **Print Range** section of the **Print** dialog box is used to select which pages will be printed. Selecting **All** will print the entire report, where as selecting **Pages** and specifying **From** and **To** will print only the selected pages.

- Click on the up or down arrow at the right of the **Copies** box to select the number of copies of the report to print.
- Select the **Collate Copies** checkbox to collate multiple copies of the printed report.
- Select **OK** to start printing the report.
- Select **Cancel** to close the dialog box without printing the report.

**NOTE:** PC30A does not provide a dialog box to set up the printer. PC30A will print to a default printer using default page setup.

**Exiting PC30A**

The **Exit** menu is used to close the PC30A.

**NOTE:** Exiting PC30A stops the RCD scheduler (if enabled) from collecting Raw Car Data and the stops the reports scheduler (if enabled) from generating reports until PC30A is resumed at a later time.
3.6.2 Edit Menu

The **Edit** menu enables you to edit options, which control the overall PC30A operation, including which com ports are used if you select to connect to the Timer using serial communications, car data acquisition, etc. You can also add, edit and remove store entries from the list of store timers to acquire data. You can schedule reports of various types such as daypart, shift, day and week, from the active database. You can also edit timer settings for a connected timer or offline to a file.

Select **Edit** on the menu bar to view the drop-down **Edit** menu.

- Select **Options** on the **Edit** menu to view the **Edit Options** dialog box.
- Select **Stores** on the **Edit** menu to view the **Edit Stores** dialog box.
- Select **Reports Schedule** on the **Edit** menu to view the **Edit Reports Schedule for Stores** dialog box.
- Select **Comparison Schedule** on the **Edit** menu to view the **Comparison Scheduler** dialog box.
- Select **Edit Settings** on the **Edit** menu to view the **Edit Settings** dialog box.
Editing Options

Select **Edit** from the menu bar and select **Options** from the drop-down menu.

The **Edit Options** dialog box will appear.

Select each of the tabs in the **Edit Options** dialog box, and edit the information in each of the selections as follows.

**RCD Acquisition**

The **RCD Acquisition** option allows you to set up how often the Raw Car Data is collected from the list of stores.

! To choose the day of the week in which RCD will be collected, click on the arrow to the right of the **RCD Acquisition Align Day** box and make a selection. Selecting **Every Day** allows RCD to be collected once a day at the specified Align Time. Selecting **Multi-Periods Per Day** allows RCD to be collected at multiple intervals within each day.

! To choose the time of day at which RCD will be collected, click on the up or down arrows to the right of the **RCD Acquisition Align Time** box and make a selection. If **Multi-Periods Per Day** was selected in the **RCD Acquisition Align Day** box, the time entered in this box will act as a reference time, at which time intervals begin.

! The **RCD Acquisition Period** selection is only available when the RCD Acquisition Align Day selection is **Multi-Periods Per Day**. This selection determines the intervals at which RCD will be collected within each day. It is shown in hours and minutes (hh:mm), such as 01:00 for every hour.

In the example shown above, Raw Car Data is collected each day, beginning midnight, every three hours.

! Select **Update** to save your settings, or...
! Select **Close** to close the dialog box and ignore editions.
Com Ports

**Note:** If you are going to use a Network connection to a network-enabled System 30 Timer, then you can skip this section.

After the **Com Ports** tab is selected, a **PLEASE WAIT: Testing Com Ports** dialog box will appear, and will remain on the screen until the Modem Com Ports and the Direct Serial Com Ports are finished testing, then the dialog box shown above will appear, showing the detected com ports.

The **Com Ports** option must be set to show which PC Serial Com Ports are used for communication with local and remote modem connected store timers. The **Direct Serial Com Port** connects to a local store timer directly from your PC and the **Modem Com Port** connects to a remote store timer via modem (either internal or external) from your PC.

Click on the arrow at the right of the two Com Port boxes to choose settings from the list of modem ports that were detected.

**NOTE:** If no Direct Serial or Modem Com Ports were detected, a warning will appear telling you to make sure your PC’s Com ports are functioning properly.

When you are finished selecting the appropriate Com Ports:

- Select **Update** to save your settings, or...
- Select **Close** to close the dialog box and ignore editions.
**Report Options**

Reports Options allows you to select how the Report Time Format will appear on Summary reports, etc. You can choose either Min:Sec format to show mm:ss, or Sec Only format to show sss for time periods printed on all reports.

When you are finished selecting the Report Time Format:

! Select **Update** to save your settings, or...
! Select **Close** to close the dialog box and ignore editions.
The **File Size** option allows you to set up the maximum size of three types of files to be collected.

! Click on the up or down arrow to the right of the **Max Transfer RCD File Size** box to select a limit to the number of records (cumulative) that can be collected from a store timer in a temporary file to be used for distributed configuration of PC30As. (The PC30A stores collected RCD in its database, and also in a transfer file to be imported into another PC30A application. See [Configuring PC30A for Distributed Use](#).)

! Click on the up or down arrow to the right of the **Max Log File Size** box to select a limit to the number of entries that can be recorded in the log file. PC30A records connection and report activity in a log file for review in the event of problems with connecting to store timers, acquiring reports, etc. If the file grows to the selected size, the oldest entries will be dropped as new entries are logged.

! Click on the up or down arrow to the right of the **Max Years in Database** box to select the number of years worth of RCD records stored in the active database for each store timer. Data is deleted on a rolling cutoff basis. For example; if 5 years is selected, every day, the data stored in excess of 5 years prior to the current date will be deleted from the database.

When you are finished selecting the File Size:

! Select **Update** to save your settings, or…

! Select **Close** to close the dialog box and ignore editions.
The **RCD Acquisition Recovery** option allows you to control the number of times and how often PC30A will attempt to connect to a remote store timer to collect Raw Car Data when a scheduled RCD Acquisition attempt fails.

- Click on the up or down arrow to the right of the **Maximum Retries** box to select the number of times the PC30A will retry to get Raw Car Data.
- Click on the up or down arrow to the right of the **Retry Interval** box to select the amount of time the PC30A will wait between retry attempts.

**NOTE:** If a retry session has begun (store retry count is not ZERO) and you select a lower value for Maximum Retries, the store’s retry count will be adjusted to a lower value during the next failed retry. (e.g. Store X failed to get RCD, and its retry count is now 5. Then Maximum Retries is set to 2. During the next retry attempt Store X fails to get the RCD again, and its retry count is adjusted to the new Maximum Retries, which is 2.) However, if a user selects higher number of retries than current retry count, the store will continue to decrement its original retry count until all retries are exhausted.

**NOTE:** If a scheduled RCD acquisition occurs during a period of ongoing retries, the retries will be cleared.

When you are finished setting the RCD Acquisition Recovery times:

- Select **Update** to save your settings, or...
- Select **Close** to close the dialog box and ignore editions.
Editing Stores

Select Stores from the drop-down Edit menu, or...

Click on the Edit Stores toolbar button.

The Edit Stores dialog box will appear.

The Edit Stores dialog box provides an opportunity to view connection details for all stores and timers in the list of stores to which the PC30A can connect. It will also allow you to modify, add and delete store information.

To view each store currently entered for connection to PC30A, use the left or right arrow buttons near the bottom of the Edit Stores dialog box to move one-by-one through store records, or use the left or right arrow buttons to go to the beginning or end of the list of store records.

To add a new store to the list of stores, select the Add button to enter Store Information and Store Connection Options.
Store Information

! **Store ID: Required.**  Must match store ID of timer to be connected. If necessary, check System 30 Timer setup using the Timer menus to determine the Store ID.

! **Name:** Optional.  Name of the store.

! **Street:** Optional.  Location of store.

! **City:** Optional.  Location of store.

! **State:** Optional.  Location of store.

! **Zip:** Optional.  Location of store.

! **Get Scheduled RCD □:** Check this box if you want to schedule importing of RCD from this store timer.

! **Get Schedule Settings □:** Check this box if you want to schedule importing of store timer settings (used to interpret the RCD for reports) each time RCD is imported.  This information can be used to verify that all settings match the timer settings.
Store Connection Options

- **Connection**: Required. Choose NETWORK if this is a listing for a remote store timer that connects to PC30A using LAN or WAN (Local or Wide Network connection). Choose MODEM if this is a listing for a remote store timer that connects to PC30A through a modem. Choose DIRECT if this is a listing for the local store timer that is directly connected to your PC through a serial cable.

- **Phone #**: Required for modem connections.
  - **Note**: If you are calling from an office that requires dialing a number such as 9 for an outside line, in the Phone Number listing, you must add the number followed by a comma, followed by the actual number.
  
  **Example**: If the number is 867-5309, enter 9,867-5309

  - **Note**: If you are calling from a Store that has a ComSwitch on the phone line, and the call is not long distance, you must add #11,#11,#11 to the end of the phone number.
  
  **Example**: If the number is 867-5309, enter 867-5309,#11,#11,#11

  - **Note**: If you are calling from a Store that has a ComSwitch on the phone line, and the call is long distance, you must add ,,#11,#11,#11 to the end of the phone number.
  
  **Example**: If the number is 1-505-867-5309, enter 1-505-867-5309,,,#11,#11,#11

- **Modem String**: Required for modem connections. The default modem string is AT&F0E0HQ0V1X0&K0&B1&H1&M4. The modem used must comply with the string, which is composed of the following commands:
  - E0 = Echo off
  - Q0 = Display result codes
  - V1 = Enable verbal codes
  - X0 = Basic result code set (OK connect, ring, no carrier error)
  - &K0 = Compression is turned off
  - &B1 = Ensure the modem baud rate remains fixed during modem negotiation

  Please consult your modem manual to be sure you comply with the intent of these settings if you change this modem string to support your modem.

  **NOTE**: For US Robotics and 3COM modems, it is recommended to add &B1 to the modem initialization string for each store, which uses MODEM connection. The &B1 command ensures the modem’s serial port rate does not change based on connection, but stays fixed. For non-USRobotics modems, remove &B1 from the modem string and consult your modem manual for an equivalent option.

  **NOTE**: For more reliable serial communication, Normal/ARQ Error control should be enabled if possible (for US Robotics & 3COM modems, this setting is &M4 in the initialization string).

- **Baud**: Required for serial or modem connections. If you are using a modem connection, use the down arrow to the right of the Baud box to set any baud that is supported by your modem. If you are using a direct serial connection, this setting MUST match the baud setting of the System 30 Timer, 9600, 19200 or 38400 (Timer Default). Refer to the System 30 Timer Operating Instructions and check the timer settings to find out which baud setting is used.
Wait Time: *Required for modem and Network (TCP/IP) connections.*
Use the up and down arrows to the right of the **Wait Time** box to set the amount of time the PC30A will wait for a modem connection to be made. For NETWORK connection this setting sets delay duration between attempts to establish IP session.

**IP Address:** *Required for Network (TCP/IP) connections.* Used to identify the IP Address of the Network-enabled Sys30A Timer.

**IP Port:** *Required for Network (TCP/IP) connections.* Used to identify the IP Port of the Network-enabled Sys30A Timer.

Other Store Edit Controls

The **Default** button is used to default settings while you are adding or editing a store.

The **Refresh** button is used to refresh/update the database with the latest store options editions.

The **Delete** button is used to remove a store from the list.

**NOTE:** If you desire to change a store ID, you must delete the store and use the Add button to create a new store entry with the correct store ID. This will cause the stores Raw Car Data to be lost. You can archive the store’s data; see **Archiving and Compacting Active Database Files**.

The **Edit** button is used to change settings of the store currently shown in the **Edit Stores** dialog box.
Editing Reports Schedule

This dialog box provides the ability to schedule specific Summary Reports for a selected store to be printed or saved to Excel™ file format using the PC30A Scheduler.

To open the Edit Reports Schedule for Stores dialog box shown below:

1. Select Edit Reports Schedule from the drop-down Scheduler menu, or...
2. Select Reports Schedule from the drop-down Edit menu, or...
3. Press the button on the toolbar.

The Edit Reports Schedule for Stores dialog box will appear.

First select a store by clicking on its line in the Select a store list box. Use the scroll button to the right of the box if necessary.

Next, choose the type of report (e.g. DAYPART 1 or DAYPART 2, etc.) you would like from the Select a report list box. Use the scroll button to the right of the box to view the list of report types available.

NOTE: The Print and Save columns in the Select a report list box indicate whether a report has been selected for printing or saving (exporting) to file. Saved reports are located in C:\ProgramFiles\Hme\PC30A\ActivePC30A\dbStores.
The following table lists the types of reports that can be scheduled:

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Report Parameter(s)</th>
<th>Report Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAY</td>
<td>0 (Not Applicable)</td>
<td>Once a day at the end of the store hours.</td>
</tr>
<tr>
<td>DAYPART</td>
<td>1-12</td>
<td>After the completion of the specific Daypart.</td>
</tr>
<tr>
<td>HOUR</td>
<td>0-23</td>
<td>After the completion of the specific hour</td>
</tr>
<tr>
<td>MONTH</td>
<td>0 (Not Applicable)</td>
<td>After the completion of each month</td>
</tr>
<tr>
<td>SHIFT</td>
<td>1-3</td>
<td>After the completion of the specific shift.</td>
</tr>
<tr>
<td>WEEK</td>
<td>0 (Not Applicable)</td>
<td>After the completion of each week.</td>
</tr>
<tr>
<td>YEAR</td>
<td>0 (Not Applicable)</td>
<td>After the completion of the fiscal year.</td>
</tr>
</tbody>
</table>

Each report can be scheduled by enabling either the Print or Save flags, using Print Report and Save Report checkboxes. When the report is scheduled for printing or saving, the Print or Save cells will change from No to Yes. If the report interval is OFF (such as Shift or Daypart), the Last Report Date will indicate it by displaying OFF in the appropriate cell.

The Scheduled Reports will be generated after a successful Raw Car Data acquisition session for the scheduled store, if the Date/Time of the RCD session exceeds the end of the report period. In other words, the Scheduled Report will not be generated until the Raw Car Data has been collected for that report interval.

NOTE: By checking a box, the coinciding status field in the grid for print or save is updated.

! To enable all reports use the Schedule All button.

CAUTION: This will cause a report to be generated for every type of Summary Report available after each Report’s time period has been completed.

! To disable all reports use the Clear All Reports button. This will disable all scheduled Summary Reports.

You have the option to begin scheduling at a given day by entering the date in the Last Report Date column. “Last Report Date” implies the scheduled report will be generated for the next report period. (e.g. If the “Last Report Date” for a Day report contains 05/14/2001 11:29:59 PM [U.S.A. date/time locale], the next Day report will be generated for 05/15/2001).

NOTE: If the report is scheduled for the first time, the PC30A defaults the “Last Report Time” so only the most current report, which lies within the current report interval, is generated. To start a report generation on a given day, use the Last Report Date column of the Select a report grid to enter the start date to begin scheduling report. Remember to enter a date within the previous report period to generate a report for a given date.

! Select the Close button to save the changes and exit the dialog box.

! To verify the schedule of the reports, select From Database from the drop-down Reports menu, and select Report Schedule.
Viewing and Editing Store Settings

View and Edit System 30 Timer Settings

PC30A allows you to view and edit System 30 Timer Settings offline, as well as download and upload them from/to timers and files. This capability provides you with the power to remotely modify the settings of a given store’s timer, which affects the operation of the timer without having to be present at the store. Once you are satisfied that the settings are valid, you can either save (upload) those settings groups to timer or to file. The settings of the System 30 Timer that can be changed using PC30A are organized according to Settings Groups. These Settings Groups include:

- Installer Settings Group
- System Settings Group
- Report Setup Group
- Remote Settings Group
- Service Goals
- Master Goals Settings Group
- Daypart Goals Settings Group

Installer Settings Group

The Installer Settings for the System 30 include Lane Configurations, Queue and Service Times, Detector Settings and other configuration information. Adjusting lanes, detectors or events will cause other Settings Groups to be initialized.

Service Goals Group

The Service Goals consist of Master Goals Group and Daypart Goals Group. Use the Master Service Goals as a template for copying to Daypart Service Goals. The Daypart Service Goals are used to control the application of the goals to the Summary Reports, Remote displays, and Alarms.
Remote Settings Group

The Remote Settings are used to control the behavior of remote displays connected to a given System 30 Timer. PC30A is able to configure either the R30 Remote Display Type or the later R31 Multicolor Remote Display Type. This group also has settings for the alarm feature of the System 30 Timer. Refer to Installer Settings Group for settings such as Events, Lanes; and the Service Goals Settings for description of goals.

System Settings Group

The System Settings are used to control store hours, Accounting, Passcodes, Shifts and Dayparts hours. These settings are adjusted using the following methods. Changes to these settings should not affect other settings groups.

Report Setup Group

The Report Setup group is used to control when scheduled reports are to be printed at the System 30 Timer.

Settings Group Relationships:

PC30A automatically adjusts individual settings that are affected by these settings groups in order to make sure that they remain valid for uploading to a given store timer, using the following rules:

1. Defaulting the settings using the Default Groups method Default/Download/Upload Settings causes all Settings Groups to be defaulted to a known state (according to the selected lane configuration).
2. Changing the Lane causes the Installer Settings Group, the Master Goals Group, the Remote Setup Group, and the Daypart Goals Group to be defaulted.
3. Changing the Detection Type in the Installer Settings Group causes the Master Goals Group, the Remote Setup Group, and the Daypart Goals Group to be defaulted.
5. Changing the Goals in the Master Goals Group causes these goals to be copied to all Daypart Goals, replacing any previously set individual Daypart Goals.
6. Any changes to other settings within the Settings Groups do not affect other settings.
Initial Edit Settings Screen:

The following screen depicts the initial view that you get when you start to edit settings. Any time you enter this screen from the **Menu>Edit>Edit Settings** menu selection, PC30A preloads the setting values with SINGLE-LANE Default settings. The first step in editing settings is to press the *Open* button to choose the source to be edited. It can be one of the stores from the Store List, or Single/Dual Lane Default, or User-Defined Files (which have been saved during previous editing sessions).

**CAUTION:** While you are in the Edit Settings Screen, the RCD scheduler and report scheduler are disabled and will delay the gathering of data and reports. Be sure to exit this dialog box once you are finished editing settings!

![Edit Settings Screen](image)
Open (Download) Settings for Viewing or Editing

After pressing the **Open button**, the following dialog box appears prompting you to select the source of the settings to be edited. Select the source of the settings to be edited by clicking on a line of the Store List provided. Note also the ability to edit a Timer’s time/date, which is covered on page 48.

![Store Settings Selection](image)

Opening Settings From a File

! **Default Settings**
You can open settings for defaults including Single and Dual Lane Configurations. These settings are pre-configured and may not reflect the exact values you want to use for your store; however, they are a starting point for creating timer settings that are specific to your needs.

! **User Files**
You can open settings that you have previously saved on disk. These files contain all of the setting changes you made prior to saving them. These are useful for archiving different configurations prior to their being saved (uploaded) to actual timers. Note that these files must be created by PC30A. By selecting an Installer Settings file (with the name: "*_INST.TXT"), PC30A will open the rest of the settings files automatically.
Opening Settings Directly from the Timer

PC30A allows you to directly connect to a store timer and acquire its settings for editing. This approach would be used if you do not want to collect Raw Car Data for a store, but would rather change settings only.

! Select the Store for which you want to open settings.
! After you press the OK Button, the following dialog box appears to connect to the store you selected.
! Once connected, PC30A gets the settings from the store timer, and then disconnects from the store. You will then be able to edit those settings immediately.

! Store Timer Files
You can open settings for a specific store timer included in the list of timers. These store timer entries were created in the Edit Stores dialog box (see Editing Stores). Note that stores which are added to the store list, but do not have their settings retrieved yet, will not be in the list. In order to edit settings for a given timer, the settings for the timer must be downloaded first. Use the Edit Store Dialog Box (See Editing Stores) to ensure that the Get Scheduled Settings box is checked for stores whose settings you wish to change. You should also make sure that the settings for a given store are current before you attempt to edit them. This can be done by acquiring Raw Car Data for a given store either via a scheduled RCD collection or a manual RCD collection to the store prior to editing the settings files. (See Manually updating Car Data from a Store Timer).

If the files associated with the store exist, then you will be able to edit those settings immediately.

If the following warning appears, you need to follow the procedure above to make sure that the timer settings files exits.
Editing Individual Settings

The individual settings that you can edit are numerous, but are organized in groups. You start out by selecting the group you are interested in viewing/editing.

Use the Group pull down menu to select which group of settings you want to view/change. The figure below, shows an example for the Installer Settings Group.

![Installer Settings Group](image)

Select one of the tabs, which help organize a given group’s settings. In this case you can choose from General Tab or Detector Points Tab for the Installer Settings Group.

Now click on specific Value fields in the Settings Grid to enter edit specific values.

There are two ways to edit a cell in the Value column.

1. If you click in a cell and a small button appears at the right end of the cell, you must click on the button to see what options are possible, such as selecting corresponding values or dates/times, etc.
2. If you click in a cell and no button appears at the right end of the cell, you can edit the value directly.

NOTE: Below the settings grid is a text box that explains the meaning of a given setting. Use this to guide your editing as well as consulting your System 30 Timer Operating Instructions Manual.
You can select other Settings Groups from the Group pull down menu. You then follow the above procedures until the settings for your Store Timer are exactly as you want them.

You are now ready to save the settings back to a timer or user file.

**Saving (Upload) Settings**

After completely editing the timer settings, you can save them to one of three locations: an actual Timer, a User File, or a Timer Settings File.

**NOTE:** By saving settings to a Timer, PC30A will synchronize the settings of the System 30 Timer and Timer files on the PC.

**Canceling an Edit Session**

**CAUTION:** *If you press the Cancel button, you will lose all settings changes you have made since the last time you saved the settings.*
Edit Timer Time

Edit Time of the Store Timer

The PC30A can be used to set/adjust current System 30 Timer time. To edit the time, select “Edit time/date of the Timer” option in the “Edit Store Settings Selection” dialog, highlight the Store you are going to edit and press the OK button.

It will open the following “Edit System 30 Timer time” window.

Using this dialog box, you can:

- Adjust current Timer time by moving the time backward or forward using Relative Time Adjustment. You can adjust the Timer time using this option up to a maximum of + or – 25 hours. Use this approach if you simply want to shift time from the current Timer baseline.

  **NOTE:** Negative Time Offset indicates the Timer time is slower than the time on the PC.

- Set Date and Time using Absolute Time Adjustment. This option allows you to set the time regardless of the current Timer time.

- Set Automatic Daylight Savings flag using Edit Daylight Savings to allow Timer to automatically adjust time when daylight savings adjustment occurs in fall and spring time periods. (For all version timers other than A.2.3* and K.2.3*)

  **NOTE:** The daylight savings will always be disabled in A.2.3* and K.2.3*.

  **CAUTION:** When editing time backward, the Timer time should not be moved before the System 30 Last Raw Car Data Record time, or the Timer database may become corrupt.
3.6.3 View Menu

PC30A provides a View screen in order to preview reports prior to exporting or printing them. This screen continues to display the last requested report until a new report is generated or the screen is cleared.

PC30A displays the latest operational error on the Main Screen to show the cause of a failed operation. In order to avoid confusion, before starting another operation, the previous error can be cleared using the View Menu.

! Select Clear Screen on the View menu to clear the Report View.

! Select Clear Previous Error on the View menu to clear the Error Status Line.

Clearing the Screen

PC30A provides you a View screen for previewing reports prior to exporting or printing them. This screen continues to display the last requested report until a new report is generated or the screen is cleared.

Select View on the Menu Bar for the drop-down View menu.

Select Clear Screen on the View menu to clear the Report View.

Clearing Previous Error

PC30A displays the latest error on the Main Screen to show the cause of a failed operation. In order to avoid confusion, before starting another operation, the previous error can be cleared.

Select View on the Menu Bar for the drop-down View menu.

Select Clear Previous Error on the View menu to clear the Error Status Line.
3.6.4 Store Menu

The Store menu enables you to make network, direct serial or modem connections to timers. You can also disconnect from a currently connected store timer using this menu. The Store menu also allows you to open a dialog box for editing stores. Finally, you can refresh (update) the Raw Car Data from the currently connected store.

Select Store on the Menu Bar to view the drop-down Store menu.

- Select Connect on the Store menu to view the Manually Connect to Store dialog box, to connect to any of the stores listed in the Store List, or to edit the list.
- Select Direct Serial Connect on the Store menu to connect PC30A to a local store timer connected to your PC via serial Com port.
- Select Disconnect on the Store menu to disconnect from the connected store timer.
- Select Edit Stores on the Store menu to open a dialog box for editing stores options.
- Select Monitor On on the Store menu to start monitoring a store timer that has been connected. Note that you can continue to monitor a store after you disconnect from that store.
- Select Monitor Off on the Store menu to stop monitoring a store timer.
- Select Refresh RCD for connected store on the Store menu to refresh RCD from the connected store timer.
Manually Connecting to a Store timer

! Select Store from the Menu Bar and select Connect from the drop-down menu, or...
! Select Store from the Menu Bar and select Direct Serial Connect from the drop-down menu, or...

! Select the  button.

The Connect to Store dialog box will appear. Select a store from the Store List as follows.

Store Selection

To select a store timer, use the Store List grid and highlight the row containing the desired store. Stores are identified by StoreID, Store Name, and Connection type. Use a mouse or up/down arrows of the keyboard to scroll from store to store. Note the connection type for each store, which indicates how the store timer is connected (NETWORK, MODEM or DIRECT).

Activity Log

The Activity Log monitors the progress of the connection already in progress and displays any visible feedback about the connection. It also shows any communication or settings errors that may occur while trying to connect to a store. For troubleshooting communications, checking the View Debug Commands checkbox allows the Activity Log to display the communication data sent between PC30A and the Modem/Timer.
Connect

To start a connection, after the store has been selected, click on the Connect button (or use Alt + ‘n’ shortcut).

Disconnect

To cancel the connection attempt, while it is in progress, use the Disconnect button (or use Alt + ‘d’ shortcut).
This command will close the dialog box.

Abort

To abort the current connection attempt without closing the dialog box, use the Abort button (or use Alt + ‘a’ shortcut). This command leaves the dialog box open for another connection.

Edit

To edit the currently selected store, use the Edit button (or use Alt + ‘e’ shortcut), which will open the Edit Stores dialog box so the selected store can be edited. After making the desired changes, select Save Store or Cancel, then select Close to close the Edit Stores dialog box and to return to the Manually connecting to a store dialog box.

Close

To cancel the connection attempt, while it is in progress, select Close (or use Alt + ‘c’ shortcut), to close the dialog box and abort any connection attempt in progress.

Note: The View Debug Commands checkbox can be selected to display the connect commands for debugging purposes.

Manually Disconnecting from a Store Timer

After you have connected to a System 30 Timer and collected its raw car data, you must disconnect from the timer before connecting another store’s timer or exiting the program.

CAUTION: Do not disconnect PC30A from a Timer while it is collecting data, or the file associated with the data may lose some records.

To manually disconnect PC30A from a System 30 Timer, select Store from the PC30A Menu Bar, and select Disconnect from the drop-down menu, or select the icon from the button bar to disconnect.

NOTE: After 5 minutes of inactivity (i.e. no new functions involving the connected store timer), if you have not disconnected from the timer, the PC30A will automatically be disconnected.
Manually Updating Car Data from a Store Timer

If you are connected to a Timer, you can update the Raw Car Data from an
the store by selecting **Store -> Refresh RCD for connected store** from the
drop-down menu. The **Getting RCD for the Connected Store** dialog box
will appear and remain open while the Raw Car Data and Timer settings
are being imported into the Active PC30A Database. This function collects
Raw Car Data from the store Timer into the active database and into an
export file (for further distribution of RCD to other computers running
PC30A, for example). Once completed, the **Getting RCD for the
Connected Store** dialog box will close.

The dialog box consists of the **Activity Log**, **Acquisition Progress** bar
and **Abort** button.

**Activity Log**

The **Activity Log** monitors the progress of the Raw Car Data and settings
acquisition and displays feedback about the connection. The Activity Log
shows step-by-step status while data is being transferred from the timer
into a text file, or while the text file is being imported into the database.

**Acquisition Progress Bar**

The **Acquisition Progress** bar shows the activity of the Raw Car Data
transfer from the Timer to the text file, and of the text file into the Active
Database. The progress bar does not indicate the completed percentage
of data acquisition, but simply indicates that PC30A is busy acquiring data.

**Abort Button**

To cancel the acquisition of the RCD and close the dialog box, select
the **Abort** button.
Monitoring Car Activity at a Store Timer

Store Monitor

PC30A gives you the ability to monitor the activity of a given Store Timer by displaying Car Records for all vehicles as they pass through the Drive-Thru Lane of a store. The benefits of this feature allow you to see what times cars are experiencing for critical times of the day. A store manager, running PC30A can use this active information to determine which areas of the Drive-Thru Lane need improvement in terms of speed of service.

Starting Store Monitor while connected to a Store Timer

You can initiate the Monitor only if you are already manually connected to a store (See Manually Connecting to a Store Timer for instructions on how to connect to a store). Once connected to a store timer, you will notice that the Disconnect and the Monitor toolbar buttons on the main frame become active.

In order to start the Monitor on a connected store timer, select the Monitor toolbar button:

PC30A reacts by reducing the size of the report display and creating a monitor grid. This monitor grid is not initialized until the first monitor event from the Timer is received as shown below.

As PC30A receives new car records from the Store Timer, it displays them from top-to-bottom order on the monitor grid as shown below. The information included in the monitor includes:

- Departure Date
- Departure Time
- Event Times at particular detectors
- Queue Times that follow the previous detectors
- Lane Number that car passed through

The monitor is self-limiting in terms of the number of Monitor records that are displayed. Only the newest 50 cars are displayed on the scrolling monitor grid.
Continuing to Monitor a Store without a Command Connection to a Store Timer

It is possible to disconnect from the timer in the sense that no more commands are sent to the timer and still display monitor events as they occur. If you plan to monitor cars at a store for extended periods of time that exceed 5 minutes, it is recommended that you disconnect from the store timer, leaving the monitor enabled and the physical connection (modem and port) intact.

In order to disconnect from the store timer (in terms of commands) while still monitoring the store, select the Disconnect from Store toolbar button:

PC30A reacts by maintaining a physical connection to the store timer (Network, Modem or Direct serial connection), but stops sending commands to that timer. At this point the store timer continues to send monitor events to the PC30A's monitor grid for your review.

Stopping Store Monitor

Whenever you enter monitor mode, PC30A provides a toolbar button to turn off the Monitor.

Use this button to kill monitor mode in which case the monitor grid disappears and PC30A is physically disconnected from the Store Timer.

NOTE: While in the Monitor mode, PC30A disables the input of reports to the PC from the Store Timer.

While in the Monitor mode, running the Raw Car Data scheduler will terminate the Monitor mode.
3.6.5 Reports Menu

The Reports menu enables you to obtain reports manually (on demand) in addition to the automatically generated, scheduled reports, based on either the active or archived database, or from the currently connected store timer. Select Reports on the Menu Bar to view the drop-down Reports menu.

Generating Reports

The PC30A provides you with powerful reporting capabilities. It is possible for you to generate On-Demand Reports that can be viewed in the Report Viewer from two data sources:

- The Active / Archive Database.
- The System 30 Timer, to which you are currently connected.
The PC30A allows you to create the following types of Reports and Settings:

<table>
<thead>
<tr>
<th>REPORT TYPE</th>
<th>FROM TIMER</th>
<th>FROM DATABASE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hour</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report(s) for specified hour / multiple days.</td>
</tr>
<tr>
<td>Day-part Summarized</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report for specified daypart averaged over multiple days.</td>
</tr>
<tr>
<td>Day-part Itemized</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report(s) for specified daypart / multiple days.</td>
</tr>
<tr>
<td>Shift</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report(s) for specified shift / multiple days.</td>
</tr>
<tr>
<td>Day</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report(s) for multiple days.</td>
</tr>
<tr>
<td>Week</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report for specified week.</td>
</tr>
<tr>
<td>Month</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report for specified month.</td>
</tr>
<tr>
<td>Year to Date</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summarized Drive-Thru Activity Report for current year.</td>
</tr>
<tr>
<td>RCD</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Raw Car Data Records for every car passing through Drive Thru. *</td>
</tr>
<tr>
<td>Every-Car Report</td>
<td>From Timer</td>
<td>Use RCD Report instead</td>
<td>Real-time Drive-Thru Activity Report for individual cars</td>
</tr>
<tr>
<td>All Settings</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>List of all settings for the store Timer.</td>
</tr>
<tr>
<td>Installer Setup</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Installer settings (Lane Configuration Queue, and Service Timer, Detector Settings) Report</td>
</tr>
<tr>
<td>Service Global Setup</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Service goals report consists of goals used to report Drive-Thru Efficiencies in Summary Reports.</td>
</tr>
<tr>
<td>Day-part / Shift Setup</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>List of dayparts and shifts used to divide the store day for reporting</td>
</tr>
<tr>
<td>Report Setup</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>List of reports that are scheduled to be printed at the store Timer</td>
</tr>
<tr>
<td>System Setup</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Store Id, pass codes, firmware version, store hours</td>
</tr>
<tr>
<td>Excess Time</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summary of event times exceeding a specified Timer</td>
</tr>
<tr>
<td>Inactivity</td>
<td>From Timer</td>
<td>From specified store ID in database</td>
<td>Summary of inactivity time in the drive-thru lane</td>
</tr>
<tr>
<td>Comparison Summary</td>
<td>From Timer</td>
<td>From multiple stores</td>
<td>Multiple summarized drive-thru activity reports for comparison of stores</td>
</tr>
</tbody>
</table>

*NOTE:* This report displayed in the Report Viewer is only a representation of the data, since this report is intended to be saved to file, rather than completely viewed for printing, etc.
Report Formats

The following reports listings are examples of the types of reports that are available from the PC30A Application:

Summary Report from Connected Timer

These Timer Summary and Settings Reports are acquired from the Connected Store Timer and are formatted exactly as they would be printed at the timer’s printer.

NOTE: Multiple reports can be obtained and appended to additional blank columns in order to do comparative analysis if desired. If more than 4 reports are requested, they will be added to the next available blank page, starting in the first column.
Raw Car Data Report from Connected Timer

Note that if you acquire an RCD report, this Report is saved to file and a representation of the report is placed on the Report Viewer (the entire report is not shown since this is exclusively a filed report).

This Timer-derived RCD Report provides a column for all events that are possible. In addition, record times, record event titles, record types (pull outs, departures, resets, etc.), number of cars in lane at the time of the record, and lane are added to this record.

The following is an excerpt from the file that is saved for this report:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Types</th>
<th>Store ID</th>
<th>Cars In Lane</th>
<th>Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/14/2005</td>
<td>3:19:57 PM</td>
<td>Car_Departure</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>9/14/2005</td>
<td>3:20:10 PM</td>
<td>Car_Departure</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>9/14/2005</td>
<td>3:20:25 PM</td>
<td>Car_Departure</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>9/14/2005</td>
<td>3:20:40 PM</td>
<td>Car_Departure</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

NOTE: This file can be imported into a database or spreadsheet. The data will not appear wrapped as it does in this example, but will be extended to its horizontal limits.
Raw Car Data Report from Database

This report is generated from the Active or Archived Database rather than from a Connected Timer. The format of this report limits the columns to the detection points and the events that make up the Timer configuration. This is different from the Timer-derived RCD Report, which provides a column for all events that are possible.

In addition, record times, record event titles, record types (pullouts, departures, resets, etc.), number of cars in lane at the time of the record, and lane are added to this record.
Summary Report from Database (Hour Report Example)

This report contains totals for each Timer event, percent of cars under particular goals and other statistics.

**NOTE:** This example is for an Hour Report. Summary Reports for other time periods (such as Daypart, Shift, etc.) follow the same format, with different time ranges.
Settings Report from Database (Installer Settings Report Example)

PC30A maintains a local copy of a Store Timer’s settings that are transferred from the Timer. These settings are used to calculate Summary Reports from the database. These reports are similar to the Settings Reports that can be printed from a store timer; however, the Timer Reports are formatted in a more user friendly format (see Getting Summary Reports from a Store Timer).
Getting Summary Reports from a Store Timer

To generate a **Summary Report from the Store Timer**, select **Reports** from the Menu Bar followed by a selection of **From Timer** and **Summary Reports**… The following dialog box appears:

![Store #30 Report Selection](image)

**NOTE:** The Database Range field in the Dialog Box ranges from the Departure Time of the first record in the System 30 Timer Raw Car Data Database to the current time of the System 30 Timer, for the currently connected store. The System 30 Timer Raw Car Data Database range applies to the following reports:

- Every Car Report
- Hour Report
- Shift Report
- Daypart Report
- RCD Report

The Database Range field in the Dialog Box ranges from the Departure Time of the first record of the System 30 Timer Summary Database to the current time of the System 30 Timer, for the currently connected store. The System 30 Timer Summary Database range applies to the following reports:

- Day Report
- Week Report
- Month Report
- Year To Date Report
Click on the down arrow to the right of the Choose a Report box to view the drop-down menu, and choose a report. Based on the type of report chosen, other edit controls in the dialog box will be enabled to allow you to select report parameters for the report type. The table below lists the edit controls that need to be set in order to acquire the report.

<table>
<thead>
<tr>
<th>REPORT TYPE</th>
<th>OTHER EDIT CONTROLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Settings Reports</td>
<td>Get Report</td>
</tr>
<tr>
<td>Every Car Report</td>
<td>Report Range Dates and Times and Get Report</td>
</tr>
<tr>
<td>Hour Report</td>
<td>Report Range Dates and Start Time and Get Report</td>
</tr>
<tr>
<td>Daypart Report</td>
<td>Options (Summary or Individual) and Daypart and Report Range Dates and Get Report</td>
</tr>
<tr>
<td>Shift Report</td>
<td>Shift and Report Range Dates and Get Report</td>
</tr>
<tr>
<td>Week Report</td>
<td>Report Range Start Dates and Get Report</td>
</tr>
<tr>
<td>Month Report</td>
<td>Report Range Start Dates and Get Report</td>
</tr>
<tr>
<td>Year to Date</td>
<td>Report Range Start Dates and Get Report</td>
</tr>
<tr>
<td>RCD (Raw Car Data)</td>
<td>Report Range Dates and Times, Options (comma or tab) and Get Report</td>
</tr>
<tr>
<td>Blank</td>
<td>Get Report (Generates a blank report)</td>
</tr>
</tbody>
</table>

**NOTE:** The PC30A must be connected to a System 30 Timer to access these reports.
Getting Summary Reports from the Database

To generate a Summary Report from the Active Database, select Reports from the Menu Bar followed by a selection of From Database and Summary Reports... The following dialog box appears:

![Diagram of the Summary Reports dialog box]

**NOTE:** The Database Range filed in the Dialog Box reflect the Departure Times of the first and the last records in the PC30A Active Database for the currently selected store. The Database Range applies for all reports from the PC30A Active Database.

Click on the down arrow to the right of the Choose a Report box to view the drop-down menu, and choose a report. Select which store Timer’s data is to be used to generate the report by selecting the store in the Select Store list box.

Based on the type of report, other edit controls in the dialog box will be enabled to allow you to select report parameters specific to the report type. The table below lists the edit controls that need to be set in order to acquire the report.

<table>
<thead>
<tr>
<th>REPORT TYPE</th>
<th>OTHER EDIT CONTROLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settings Reports</td>
<td>Get Report</td>
</tr>
<tr>
<td>Every Car Report</td>
<td>Not Supported, use RCD Report</td>
</tr>
<tr>
<td>Hour Report</td>
<td>Report Range Dates / Start Time and Get Report</td>
</tr>
<tr>
<td>Daypart Report</td>
<td>Daypart and Report Range Dates and Get Report</td>
</tr>
<tr>
<td>Shift Report</td>
<td>Shift and Report Range Dates and Get Report</td>
</tr>
<tr>
<td>Week Report</td>
<td>Report Range Dates and Get Report</td>
</tr>
<tr>
<td>Month Report</td>
<td>Report Range Dates and Get Report</td>
</tr>
<tr>
<td>Year to Date</td>
<td>Report Range Dates and Get Report</td>
</tr>
<tr>
<td>RCD (Raw Car Data)</td>
<td>Report Range Dates / Times, Options (comma or tab) and Get Report</td>
</tr>
<tr>
<td>Blank</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>

**NOTE:** You can use an alternate database for your source by selecting the Open Archive button. This archive database is not used to collect new RCD, but rather for reporting archived data collected in previously active databases that have been archived. It is closed when summary Report Dialog is closed.
Getting Other Miscellaneous Reports

In addition to Summary Reports, you can also generate three reports that reflect active database settings for controlling how PC30A operates.

- **Report Schedule**: controls when selected summary reports from the Active Database are to be printed or saved to Excel files.
- **Comparison Report Schedule**: controls when selected summary reports from the Active Database are to be printed or saved to Comparison Reports.
- **Stores**: list of stores that are part of the database for connecting and collecting Raw Car Data.
- **Scheduled RCD History**: summary of Raw Car Data collection for all stores for a given time interval.
- **Options**: list of global settings that control Raw Car Data collection rates, RCD retries due to failures, Com Ports report time format (min:sec or seconds only).

In order to start these reports, select Reports from the Menu Bar, and then select From Database and Report Schedule, Stores or Options from the drop-down menus. The selected report will be generated immediately. Select Scheduled RCD History to activate a dialog box for Start and Stop times for this report.

![Scheduled RCD History Report](image)
Getting Customized Reports

Customized report form contains 3 kinds of reports:

! **Excess Time report** – provides a summary of cars that exceed a given time interval for a given event (detection point or total).

! **Inactivity Time report** – provides reporting of event (detection point or total) inactivity time within set parameters (detailed report).

! **Comparison Summary report** – multiple reports in a compact form to allow comparison of different Stores, different time intervals, different report types.

**NOTE:** All these reports require setting parameters before obtaining the report (setting filters).

---

**Step 1:** Select which report you want to receive in “Choose a Report” combo box.

To receive an **Excess Time report**:

**Step 2:** Select a particular Store from “Select Store” grid for which you want to receive the report.

**NOTE:** This report is designed for one Store at a time, but it can be used for multiple detector events (up to 8 filters).

**Step 3:** Set Start and Stop time of the report using “Report Range” controls for dates and times.

Note: Database Range window under these controls shows you a valid Start/Stop Times for this Store from the database.

**Step 4:** Choose a detector event from a pull down list “Detector Event”.
Step 5: Set the desired Time interval you want to be reported for selected detector.

Step 6: Press “Add New Filter” button. This will populate Filter grid with selected parameters.

Repeat Steps 4-5 for additional detectors (Max 8 events) if necessary.

If you decided to change detector event or time interval after setting a filter, you can do it by editing the Filter Grid itself. Press the corresponding “down arrow” button at the right corner of the grid column. It will open a corresponding pull down list for detector events or time picker control for time intervals.

If you want to delete a filter from a Filter grid, highlight corresponding row and press the “Delete Selected Filter” button. Thus you can delete all you selected filters one at a time and start from the beginning.

To get a report after you are completely satisfied with the Filter selection, press Get Report button.

You can restore the filter you used to receive a report, if right after getting the report you press the Restore previous report filter button (which any other time serves as Delete selected filter button).

NOTE: Selecting a new Store in the Select Store grid will default all selected detectors in a filter to the first activated detector from the new detector event list for this Store.
To receive **Inactivity Time report**: 

**STEPS:** Follow the same steps as for Excess time report.

**CAUTION:** This report shows each encountered inactive time interval within given Start/Stop dates. This can cause a multiple pages report. For example: Start/Stop chosen for one year and Time interval = 1 sec, will generate report for each second of this year ➔ possible 86400 * 365 events.
To generate a **Comparison Summary report**:

**Step 1:** Choose the Comparison Summary Report pull down entry.

**Step 2:** Select Store from “Select Store” grid.

**Step 3:** Select Report from “Include Report” pull down list.

**Step 4:** Set Start/Stop dates/times in “Report Range” (if applicable for selected report).

**Step 5:** Choose what kind of report you want to receive. Select Summarized or Individual in Report Options pull down list.

**Step 6:** If in Step 2, Shift/Daypart report has been chosen, set the desired Shift/Daypart number under **Report Options**.

**Step 7:** Press **Add New Filter** button to send the data from controls into Filter Grid.

If you want to edit individual filters in the Filter grid, press the right corner button in a given Filter column.
Selecting a new Store in a first column of the grid will reset all controls for this row in a Filter grid. Selecting new Report type in a second column of the Filter grid will reset Start/Stop date/times columns and DP/Shift column if applicable.

Maximum number of filter you can set for the Comparison report = 15.

**CAUTION:** This report can cause multiple pages report even with only one filter. For example:
Day report for any Store from 1/1/2000 till 1/1/2001 with Individual flag set in a report Options will generate a Day Comparison report for 365 days = almost 60 pages report.
3.6.6 Scheduler Menu

The Scheduler menu enables you to control the scheduler, forcing it to pause and resume acquisition of data from connected store timers. It allows you to edit which reports are to be scheduled for printing or to be saved to file from data stored in the database. You can use it to force the scheduler to run in order to get the latest Raw Car Data (RCD) from store timers, or to print any reports that have not yet been run.

**Note:** If your PC enters into Standby mode the Scheduler will be disabled. System Standby should be disabled for optimal Scheduler operation.

Select Scheduler on the Menu Bar to view the drop-down Scheduler menu.

- Select **Pause** from the Scheduler menu to pause the scheduled acquisition of RCD or a scheduled report from being generated.
- Select **Resume** from the Scheduler menu to resume scheduling of RCD acquisition and generation of scheduled reports.
- Select **Edit Reports Schedule** from the Scheduler menu to view the **Edit Reports Schedule for Stores** dialog box.
- Select **Edit Comparison Schedule** from the Scheduler menu to view/change when Comparison Summary Reports are scheduled.
- Select **Update RCD for All Stores** from the Scheduler menu to obtain Raw Car Data for all stores in the Stores list.
- Select **Force Reports Scheduler** from the Scheduler menu to cause the report scheduler to run and generate all reports, both summary and comparison summary that have become due.
Pausing / Resuming the Schedule

You can control the scheduler for RCD collection and Report generation using the Pause and Resume menus.

Note: If your PC enters into Standby mode the Scheduler will be disabled. System Standby should be disabled for optimal Scheduler operation.

Selecting Scheduler from the Menu Bar, then Pause from the drop-down menu will interrupt the scheduler connection to the scheduled stores and stop it from acquiring the Raw Car Data. Pausing the scheduler will also prevent scheduled summary reports from being generated. A paused scheduler will alter the PC30A icon on the PC30A main screen and the icon on the Windows taskbar to .

NOTE: PC30A does not resume automatically! Do not leave PC30A with Paused scheduler for long periods of time to avoid delaying scheduled reports.

Selecting Resume will restart the scheduler connection to the scheduled stores and resume acquiring the Raw Car Data at the next scheduled time. Resuming the scheduler will change the PC30A icon back to .
Editing the Reports Schedule

This dialog box provides the ability to schedule specific Summary Reports for a selected store to be printed or saved to Excel™ file format using the PC30A Scheduler.

To open the Edit Reports Schedule for Stores dialog box shown below:

! Select **Edit Reports Schedule** from the drop-down **Scheduler** menu, or...

! Select **Reports Schedule** from the drop-down **Edit** menu, or...

! Press the button on the toolbar.

The **Edit Reports Schedule for Stores** dialog box will appear.

First select a store by clicking on its line in the **Select a store** list box. Use the scroll button to the right of the box if necessary.

Next, choose the type of report (e.g. **DAYPART 1** or **DAYPART 2**, etc.) you would like from the **Select a report** list box. Use the scroll button to the right of the box to view the list of report types available.

**NOTE:** The **Print** and **Save** columns in the **Select a report** list box indicate whether a report has been selected for printing or saving (exporting) to file. Saved reports are located in C:\ProgramFiles\Hme\PC30A\ActivePC30A\ActivePC30AdbStores.
The following table lists the types of reports that can be scheduled:

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Report Parameter(s)</th>
<th>Report Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAY</td>
<td>0 (Not Applicable)</td>
<td>Once a day at the end of the store hours.</td>
</tr>
<tr>
<td>DAYPART</td>
<td>1-12</td>
<td>After the completion of the specific Daypart.</td>
</tr>
<tr>
<td>HOUR</td>
<td>0-23</td>
<td>After the completion of the specific hour.</td>
</tr>
<tr>
<td>MONTH</td>
<td>0 (Not Applicable)</td>
<td>After the completion of each month.</td>
</tr>
<tr>
<td>SHIFT</td>
<td>1-3</td>
<td>After the completion of the specific shift.</td>
</tr>
<tr>
<td>WEEK</td>
<td>0 (Not Applicable)</td>
<td>After the completion of each week.</td>
</tr>
<tr>
<td>YEAR</td>
<td>0 (Not Applicable)</td>
<td>After the completion of the fiscal year.</td>
</tr>
</tbody>
</table>

Each report can be scheduled by enabling either the Print or Save flags, using Print Report and Save Report checkboxes. When the report is scheduled for printing or saving, the Print or Save cells will change from No to Yes. If the report interval is OFF (such as Shift or Daypart), the Last Report Date will indicate it by displaying OFF in the appropriate cell.

The Scheduled Reports will be generated after a successful Raw Car Data acquisition session for the scheduled store, if the Date/Time of the RCD session exceeds the end of the report period. This implies that the Scheduled Report will not be generated until the Raw Car Data has been collected for that report interval.

**NOTE:** By checking a box, the coinciding status field in the grid for print or save is updated.

! To enable all reports use the **Schedule All** button.

**CAUTION:** This will cause a report to be generated for every type of Summary Report available after each Report’s time period has been completed.

! To disable all reports use the **Clear All Reports** button. This will disable all scheduled Summary Reports.

Scheduled reports have option to begin scheduling at a given day by entering date in the Last Report Date column. “Last Report Date” implies the scheduled report will be generated for the next report period. (e.g. If the “Last Report Date” for a Day report contains 05/14/2001 11:29:59 PM [U.S.A. date/time locale], the next Day report will be generated for 05/15/2001).

**NOTE:** If the report is scheduled for the first time, the PC30A defaults the “Last Report Time” so only the most current report, which lies within the current report interval, is generated. To start a report generation on a given day, use the Last Report Date column of the **Select a report** grid to enter the start date to begin scheduling report. Remember to enter a date within the previous report period to generate a report for a given date.

! Select the **Close** button to save the changes and exit the dialog box.

! To verify the schedule of the reports, select From Database from the drop-down Reports menu, and select Report Schedule.
Updating Raw Car Data for All Stores

Select the Update RCD for all stores… option from the drop-down Scheduler menu to view the Getting RCD for All Stores dialog box.

The Getting RCD for All Stores dialog box is used to get the Raw Car Data and store settings (See Store Edit) from all scheduled stores. It is used to force the Scheduler to run whether or not any of the stores have outstanding RCD Acquisition retries or are late.

**NOTE:** If no stores exist in the database or no stores are scheduled, the Getting RCD for All Stores dialog box will not open.

Running RCD scheduler successfully will “catch-up” the raw car data to the last scheduled session and void the retry session if it exits.

The Getting RCD for All Stores dialog box is composed of the Activity Log box, Acquisition Progress bar, and the Abort button.

The Activity Log monitors the progress of the Raw Car Data and settings acquisition, and displays any visible feedback about the connection. It also shows any communication or acquisition errors that occur while data from a timer is being converted to a text file, or while the text file is being imported into the database.

The Acquisition Progress bar shows the activity of the PC - Sys30Timer communication while receiving the Raw Car Data from a timer, and the import process while importing the RCD from the text file into the Active Database. It does not indicate the completed percentage of the data acquisition, but simply indicates that PC30A is in a process of acquiring the data.

To abort the current RCD acquisition and close the dialog box, click on the Abort button.
Forcing the Reports Scheduler to Run

Select **Force Reports Scheduler**… from the drop-down **Scheduler** menu to view the **Getting Reports for Scheduled Store** dialog box.

The **Getting Reports for Scheduled Store** dialog box is used to show the progress of the Reports Scheduler. This feature is used to restart the Reports Scheduler if the scheduled generation of reports was aborted by the user.

The Reports Scheduler evaluates each scheduled report for each store to determine if there is enough Raw Car Data to generate scheduled reports. The Reports Scheduler does not generate fractional reports (e.g. a half shift). The Reports Scheduler will “catch-up” to the most recent scheduled reports session if one or more reports sessions were missed due to the Reports Scheduler being busy or paused, or to the PC30A not running.

The **Getting Reports for Scheduled Store** dialog box is composed of the **Activity Log** box, **Acquisition Progress** bar and **Abort** button.

The **Activity Log** monitors the progress of the Raw Car Data and settings acquisition and displays any visible feedback about the connection. The **Activity Log** also shows any communication or acquisition errors that may occur while receiving the data from timer into a text file, or while importing the text file into the database.

The **Acquisition Progress** bar is not used by the Reports Scheduler and is disabled the entire time the dialog box is displayed.

Selecting the **Abort** button will complete the report currently being generated and close the dialog box.
Scheduled Comparison Summary Report allows you to schedule multiple reports based on report type, each for multiple stores.

Use the following steps to schedule the report.

1. Select a report you want to be scheduled using the “Select a Report” grid, which shows a list of all reports possible.
2. Check one (or both) of the “Print report” or/and “Save Report” check boxes. “Print Report” will cause report to be printed, “Save report” will cause the report to be saved at “WorkingPC30A directory + \Database\ActivePC30A\dbStores\ComparisonReports\” folder with the name corresponding PC30A file name convention.
3. If you want this report to include all Stores that you have in a database, press “Select All Stores” button. You will see that “List of Stores for selected Report” grid will be populated with the list of all Stores.
4. If you want the report not to include all Stores, but only some of them, press “Add New Store” button.
You will see a list of all Stores in a “List of all Stores” frame. Chose one by clicking (or double clicking) on the one of them. This action will cause “List of Stores for selected Report” grid to be updated by this new Store. Repeat these actions for each new Store you want to be included in a report. If you forgot to check one of the “Print/Save” check boxes while adding the new store, the report will be marked as needed to be Saved.

To remove a Store from a list of Stores to be included in a report, highlight a Store in “List of Stores for selected Report” grid and press “Delete Store” button. Repeat it for an each Store you want to remove.

To remove all Stores from the currently selected report, press the “Clear All Stores” button. The report will be unscheduled.

“List of Stores for selected Report” grid will be empty for non-scheduled reports. “Last Report Date” column of the “Select a Report” grid shows a date when this report has been obtained the last time. For newly scheduled Stores it will contain the yesterday report period. You can edit this field if you want to receive reports for the previous day intervals starting from this date by shifting the date back. If you will shift the date forward, the report won’t be generated till the “Last Report Date” become less than the PC Current Date.

If in the past, the report has been scheduled for some time, and now you decide to schedule it again, be sure to put a correct date you want the report to be started. Otherwise you will receive reports for the whole period from the last time you stopped the scheduler for this report till the current time.

Example of the Scheduled Comparison report for the Day report from the above screen:

![Comparison Report Example](image)
3.6.7 Help Menu

The Help menu allows you to access the online help files. Select Help on the Menu Bar to view the drop-down Help menu.
3.7 PC30A ADVANCED TOPICS

3.7.1 Configuring PC30A for Distributed Use

The PC30A can be used in a Distributed Configuration. This configuration allows you to collect data and settings from Timers using “Frontline” PCs running PC30A, and then import that data into a centralized PC running PC30A.

Using this configuration, you designate certain “Frontline” PC30A host computers at various locations to collect Raw Car Data from System 30 Timers via direct connections or modems as shown below.

As each of these PC30As accumulate RCD from each store in its database (for its use in reporting, etc. at that PC30A location), the data is also made available for transfer to a “Central” PC30A that incorporates it into a central database.

Note: This configuration requires the following:

1. You will need to supply the means to copy the data from the Frontline PC to the central database using RCD files.
2. That you manually import RCD files into the Central PC30A.

Figure 11. Typical PC30A distributed-use configuration
The procedure for importing data from Store Timers into “Frontline” PC30As is described in PC30A Basics.

The procedure for importing Raw Car Data from “Frontline” PC30As into a central database is as follows:

1. Set up the central PC30A and the Frontline PC30As by adding the stores assigned to each. For example Frontline PC30A #1 may have Store ID’s 1000, 1001, and 1002 assigned to it. In this case, these store IDs should be added to both Frontline PC30A #1 and the central PC30A, using the Editing Stores menu. NOTE: All of the fields for each Store must be entered for the Frontline PC30A. Only the Store ID and a fake phone number must be entered for each store at the central PC30A.

2. Set up each Frontline PC30A to collect data from each store timer into its database at a specified frequency (see Editing Options). This will cause the Frontline PC30A to also collect RCD in a file for a given store using the following naming format: STORE_ID of Store_RCD Transfer.txt, where ID_of_Store is the store ID entered for a given store (see Editing Stores).

3. PC30A will store this file in a folder located at:
   \Program\Files\Hme\PC30A\Database\ActivePC30AdbStore\ID_of_Store\Rcd,
   or at an alternate location that may have been selected by the installer when the PC30A was installed.

4. Using a transfer software such as PC-Anywhere®, located with the Central PC30A, connect to each frontline PC30A and transfer the entire contents of the following folder from the Frontline PC30A:
   \Program Files\Hme\PC30A\Database\ActivePC30AdbStore\ID_of_Store
   to the same folder on the central PC:
   \Program Files\Hme\PC30A\Database\ActivePC30AdbStore\ID_of_Store

5. Using the Central PC30A, import the STORE_ID of Store_RCD Transfer.txt into the active database using the procedure described in Importing and Exporting Raw Car Data Files. Now the central PC30A has the same data as the Frontline PC30A.

6. In addition to gathering data into a Central PC30A, it is possible to distribute portions of the database from a Central PC30A site to higher-level sites (such as regional managers who may only require portions of the total database that apply to their stores). In such cases, follow the procedures in steps 1-4; only selecting the stores of interest to be entered and imported at the higher-level sites.
3.7.2 Importing and Exporting Raw Car Data Files

The PC30A is able to import RCD from two sources:
1. Store Timers
2. Text Files

PC30A Basics describes how the PC30A collects data from Store Timers. Another approach is discussed in PC30A Advanced Topics: Configuring PC30A for Distributed Use, for collecting RCD from multiple groupings of stores without having to collect the data directly from each store. 

PC30A is also able to export RCD to a Tab or Comma delimited text file for use in 3rd party applications such as spreadsheets, etc.

Raw Car Data

The Raw Car Data menu opens another menu with 2 choices:

- Import from text file …
- Export to text file …

Import from text file …

The Import from text file… menu opens the Import RCD Text File into Active Database dialog box, which is used to import the Raw Car Data text delimited files and settings files into the PC30A Database. This feature is used for the PC30A configurations in which data can be collected from several timers by more than one PC30A, then imported to one central PC30A’s Database.
The **Import RCD Text File into Active Database** dialog box is used to select a store, for which the Raw Car Data will be imported, and the Raw Car Data text file to be imported. PC30A will import Raw Car Data and save it under the store ID that is found in the text file. If the Store ID does not already exist in the Database, these records will not appear in the any reports, even though they have been imported. Store ID’s in the Store List must match Store ID’s of timer where Raw Car Data is being acquired. PC30A will import only those Raw Car Data records that match the store ID selected on the grid. PC30A will not import records, which already exist in the database.

The Stores grid in the dialog box is used to select the store for which the Raw Car Data will be imported. The store can be selected with a mouse click on the row containing the store, or using Up/Down keys of the keypad.

The **Select File** button is used to select the text file to be imported. Selecting the **Select File** button opens a standard windows **File Open** dialog box, which allows selecting the directory and the file name of the Raw Car Data text file. After the file has been selected, a path and file name are displayed above the Status Bar.

The **Import** button is used to start the import process. Selecting the **Import** button will activate the Progress Bar at the bottom of the dialog box. The Progress Bar indicates the PC30A is busy importing data, but does not show the overall percentage of the completed task.

After the entire file has been read and appropriate data records have been imported, the number of records imported will be shown above the Status Bar.

The **Close** button is used to close the dialog box. Selecting the **Close** button will abort any import in progress.

**NOTE:** In the PC30A Database, a unique Raw Car Data record is defined by Store ID, lane number of the event, and event time.

**NOTE:** each unique RCD record imported into the Active Database is inserted in sorted order.

**Export to text file …**

The **Export to text file**… menu opens the **Export RCD into Text File** dialog box, which allows you to export the Raw Car Data into text-delimited file. This feature is used for the PC30A configurations in which different PC30A installations share data.
The Export RCD into Text File dialog box is used to select a store, whose Raw Car Data will be exported, creating a Raw Car Data text file. PC30A will export only those Raw Car Data records that match the Store ID selected on the grid, and that lie within the Start - Stop range selected on the dialog box.

**NOTE:** For PC30As used in a Distributed Configuration, settings files must be transferred together with the exported file. Without the settings files, PC30As will not be able to import Raw Car Data text files.

The Stores grid shows the Store ID, Store Name and the type of Connection to that store’s timer. The store whose Raw Car Data will be exported can be selected with a mouse click on the row of the grid containing that store, or by using up and down arrow keys of the keypad.

The Date and Time settings are used to limit the time range of the Raw Car Data to be exported. Changing the Start or Stop dates and times will affect how many records are exported to the text file.

The Tab and Comma selections in the dialog box allow you to select the text file format. Selecting Tab will format the Raw Car Data text file with columns separated by tabs, whereas selecting Comma will separate the data columns with commas.

The Select File button is used to select the text file to be exported. Selecting Select File button opens a standard windows File Save dialog box, which allows selecting the directory and the file name of the Raw Car Data text file. After the file has been selected, a path and file name will be displayed above the Status Bar.

The Export button is used to start the export process. Selecting the Export button will activate the Progress Bar at the bottom of the dialog box. The Progress Bar indicates the PC30A is busy exporting data, but does not show the overall percentage of the completed task.

After the entire file has been written and appropriate records have been exported, the dialog box will show the number of records exported above the Status Bar.

The Close button is used to close the dialog box. Selecting the Close button will abort any export in progress.
3.7.3 Maintaining Your Database

As described in the PC30A Basics, the PC30A Application uses a database file to collect Store Timer and Raw Car Data over long periods of time. As the PC30A’s database grows due to on-going collection of RCD over long periods of time, you will need to perform maintenance on the database. PC30A offers you two functions for maintaining the database: Archiving the Active Database and Compacting the Active Database.

The **Active Database** menu opens another menu with 2 choices:

- **Create Archive** …
- **Compact and Repair** …

### Create Archive

The **Create Archive** menu is used to back up all the active database’s stores, raw car data and settings files in a separate directory. This should be done on a periodic basis to limit the size of the active database to below 980MB. Even though you have an option to limit the number of years stored in the database for each store (in the **Editing Options**), the database file may grow beyond the Active Database limit within the allowable time period.

**NOTE:** Archiving the Active Database will move all of your RCD into the Archive Database, thus clearing the Active Databases Raw Car Data.

Prior to initiating a manual or scheduled RCD Acquisition session, PC30A evaluates the Active Database file size and the available space on your hard drive. Although the MS Access™ database supports file size up to 1GB, PC30A limits the size of the active database file to a maximum of 980 MB. PC30A generates a warning if file size grows beyond 931 MB (For example, if the database file size is 960KB, following message will appear:

9142: File C:\ProgramFiles\HME\PC30A\Database\ActivePC30Adb.mdb is 960000KB.  PC30A will not run when Database file size exceeds 980000KB.  Please make an archive of the database using File->Database->Archive menu.).

Also, PC30A generates a warning if the available hard disk space drops below 31.5MB (for example, if the available space on the C: drive is 31MB, following message will appear:

9140: Drive C:\ contains only 31000KB.  PC30A will not run when C:\ will contain 30000 KB of free space.  Please make more space available by deleting some files.).

These warnings are visible on the error bar of the PC30A’s main screen, and are logged to a file.
NOTE: PC30A generates an error and stops acquiring data from the store timer if file size exceeds 980MB, and displays the following message:

9141: File C:\ProgramFiles\HME\PC30A\Database\ActivePC30Adb.mdb is 980000KB, which exceeds the capacity of Database.

Please make an archive of the database using File->Database->Archive menu.
NOTE: PC30A generates an error and stops acquiring data from the store timer if the available hard disk space drops below 30MB, and displays the following message:

9139: Drive C:\ contains only 30000KB, which is not enough to run PC30A.
Please make more space available by deleting some files.

These errors are visible on the error bar of the PC30A's main screen, and are logged to a file.

Creating an archive database destroys all of the RCD in the active database, but leaves all stores and settings. The archived database and settings can be used to generate reports, but not for connecting to a store or data acquisition.

Selecting Create Archive… menu opens a warning dialog box.

Creating Archive

Archiving of the Database will move all of the Raw Car Data from the Active Database to the Archive Database.
Do you want to continue?

Yes  No  Help

Selecting Yes will take you to the Select a file name for Database Backup dialog box, with a default archive database name “PC30ABackup.MDB”, which is located in the …app_path\ArchiveDB\ directory.

Selecting No will close the dialog box with no changes to the active database.

Selecting Help will bring up the PC30A Help.
This dialog box is used to select the file name and a directory for the archive database. The selected directory and file name for the archive database are also used to create a directory with the stores settings. The directory containing stores settings is designated by adding “Stores” to the name of the archive database and storing it in the same directory as the archive database (e.g.: using archive database name PC30ABackup.MDB in the directory \ArchiveDB\, the directory for the stores’ settings is \ArchiveDB\PC30ABackupStores\).

**NOTE:** PC30A does not allow the archive database name to be same as an existing file in the selected directory. To make another archive with the same name and in the same directory, manually delete the old archive and the stores settings folders.

! Selecting **Save** will start the archive process, or…

! Selecting **Cancel** will close the dialog box.

After **Save** is selected, the Application status of the PC30A will change to “Archiving…” and the RCD scheduler will be disabled to prevent access to the active database while it is being emptied.

After the archive has been created and all the settings files have been copied, the application status on the status bar will be changed to “Ready” and the RCD scheduler will be re-enabled to acknowledge that the process has been completed successfully.
Compact and Repair

The Compact and Repair menu is used to compress the database file after the Raw Car Data has been imported into the active database from the System 30 Timer, either manually or as scheduled. Compacting the database reduces the size of the file by storing the Raw Car Data more efficiently and deleting Raw Car Data records which do not belong to any of the stores in the Stores table.

**IMPORTANT! - It is recommended that the active database be compacted at least once a week!**

Selecting **Compact and Repair** will open the warning dialog box which informs that PC30A will suspend responding to user activity while the active database is being compacted.

![Compact Database](image)

- Selecting **Yes** will initiate the compact and repair process, changing the application status to “Compacting.”
- Selecting **No** will close the dialog box.
- Selecting **Help** will bring up the PC30A Help.

After PC30A finished compacting and repairing the database, the application status will change to “Ready” to acknowledge that the process was successful.
### 3.8 PC30A ERROR CODES

<table>
<thead>
<tr>
<th>Error #</th>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>PERMISSION_DENIED</td>
<td>Permission denied.</td>
</tr>
<tr>
<td>75</td>
<td>FILE_ACCESS_ERROR</td>
<td>Path/File access error.</td>
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<td>76</td>
<td>PATH_NOT_FOUND</td>
<td>Path not found.</td>
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<td>3021</td>
<td>RS_EMPTY_ERROR</td>
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<td>3356</td>
<td>DB_EXCLUSIVELY_OPEN</td>
<td>Original message</td>
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<tr>
<td>8000</td>
<td>S30PortOpen</td>
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<tr>
<td>8056</td>
<td>S30Timeout</td>
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<tr>
<td>8067</td>
<td>S30Abort</td>
<td>Scheduled Report Generation is Aborted. Or original message &quot;request aborted.&quot;</td>
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<tr>
<td>8068</td>
<td>S30CommandRejected</td>
<td>System 30 Timer did not understand request from PC30A.</td>
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<tr>
<td>8080</td>
<td>S30BadIPAddress</td>
<td>Bad Remote Network Host IP Address Setting</td>
</tr>
<tr>
<td>8081</td>
<td>S30BadIPPort</td>
<td>Bad Remote Network IP Port Setting</td>
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<tr>
<td>8082</td>
<td>S30IPConnectionFailed</td>
<td>Exhausted retries to establish Network IP session</td>
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<tr>
<td>8083</td>
<td>S30IPConnectionClosed</td>
<td>Network IP session is closed by the remote host</td>
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<tr>
<td>8102</td>
<td>API30SettingsFileCorrups</td>
<td>Settings files from System 30 Timer are invalid.</td>
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<tr>
<td>8130</td>
<td>API30NoDataFromTimer</td>
<td>There is no new Raw Car Data since the last connection to this Store.</td>
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**Installer Settings Group Errors**

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<thead>
<tr>
<th>Error #</th>
<th>Description</th>
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<tbody>
<tr>
<td>8140</td>
<td>Invalid lane configuration</td>
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<tr>
<td>8141</td>
<td>Cannot put Internal Printer</td>
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<tr>
<td>8142</td>
<td>Cannot put External Printer</td>
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<tr>
<td>8143</td>
<td>Cannot put Service Idle Limit</td>
</tr>
<tr>
<td>8144</td>
<td>Cannot put Queue Limit</td>
</tr>
<tr>
<td>8145</td>
<td>Cannot put Max Cars in Queue</td>
</tr>
<tr>
<td>8146</td>
<td>Cannot put Detection Point Delay</td>
</tr>
<tr>
<td>8147</td>
<td>Cannot put Detection Point Type</td>
</tr>
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<td>8148</td>
<td>Cannot put Detection Point Event Type</td>
</tr>
<tr>
<td>8149</td>
<td>Cannot put Begin Discard</td>
</tr>
<tr>
<td>8150</td>
<td>Cannot put End Discard</td>
</tr>
<tr>
<td>8151</td>
<td>Cannot put Control Select</td>
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<tr>
<td>8152</td>
<td>Cannot put Control Start Time</td>
</tr>
<tr>
<td>8153</td>
<td>Cannot put Control Stop Time</td>
</tr>
<tr>
<td>8154</td>
<td>Cannot put Control Start Day</td>
</tr>
<tr>
<td>8155</td>
<td>Cannot put Control Stop Day</td>
</tr>
<tr>
<td>8156</td>
<td>Cannot put Start Total Detector Index</td>
</tr>
<tr>
<td>8157</td>
<td>Cannot put Stop Total Detector Index</td>
</tr>
<tr>
<td>8158</td>
<td>Cannot put Start Detector Edge</td>
</tr>
<tr>
<td>8159</td>
<td>Cannot put Stop Detector Edge</td>
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<tr>
<td>8160</td>
<td>Cannot put Adjustable Total Mode</td>
</tr>
<tr>
<td>8161</td>
<td>Cannot put Baud Rate</td>
</tr>
<tr>
<td>8162</td>
<td>Invalid input file string</td>
</tr>
<tr>
<td>8163</td>
<td>Violation of rules</td>
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</table>

**Miscellaneous Settings Group Errors**

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>8170</td>
<td>Cannot put Report Setting</td>
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<tr>
<td>8171</td>
<td>Cannot put Day Option</td>
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<td>8172</td>
<td>Invalid input file string</td>
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**Report Settings Group Errors**

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<thead>
<tr>
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<tr>
<td>8180</td>
<td>Cannot put Hour Range</td>
</tr>
<tr>
<td>8181</td>
<td>Cannot put Daypart Range</td>
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<tr>
<td>8182</td>
<td>Cannot put Shift Range</td>
</tr>
<tr>
<td>8183</td>
<td>Cannot put Day Range</td>
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<tr>
<td>8184</td>
<td>Cannot put Every Car Schedule</td>
</tr>
<tr>
<td>8185</td>
<td>Cannot put Hour Schedule</td>
</tr>
<tr>
<td>8186</td>
<td>Cannot put Daypart Schedule</td>
</tr>
<tr>
<td>8187</td>
<td>Cannot put Shift Schedule</td>
</tr>
<tr>
<td>8188</td>
<td>Cannot put Day Schedule</td>
</tr>
<tr>
<td>8189</td>
<td>Cannot put Week Schedule</td>
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8190 Cannot put Month Schedule
8191 Cannot put Year Schedule
8192 Cannot put Day Time
8193 Cannot put Week Time
8194 Cannot put Month Time
8195 Invalid input file string
8196 Violation of rules

**System Settings Group Errors**
8200 Cannot put Store ID
8201 Cannot put Manager Code
8202 Cannot put Report Code
8203 Cannot put Version
8204 Cannot put Config Time
8205 Cannot put First Day of the Week
8206 Cannot put First Month of the Year
8207 Cannot put First Day of the Year
8208 Cannot put Store Hours
8209 Cannot put Shift Hours
8210 Cannot put Daypart Hours
8211 Invalid input file string
8212 Violation of rules
8213 Timer version differs from the file version

**Master Service Goals Group Errors**
8220 Cannot put Detector ID
8221 Cannot put Event Type
8222 Cannot put specified Goal
8223 Invalid Event index
8224 Invalid input file string
8225 Violation of rules:

**Daypart Service Goals Group Errors**
8230 Cannot put specified Goal
8231 Invalid Day index
8232 Invalid Daypart index
8233 Invalid Event index
8234 Invalid input file string
8235 Violation of rules:

**Remote Settings Group Errors**
8240 Cannot put Remote Flash Goal
8241 Cannot put Remote Beep Goal
8242 Cannot put Remote Beep Count
8243 Cannot put Remote Tone Repeat Interval
8244 Cannot put Remote Arrival Tone
8245 Cannot put Remote Cars In Lane Tone Max
8246 Cannot put Remote Cars In Lane Flash Max
8247 Cannot put Remote Mode
8248 Cannot put Remote Lane Number
8249 Cannot put Remote Toggle Enable
8250 Cannot put Remote Toggle Interval
8251 Cannot put Remote Percent Goal
8252 Cannot put Remote Percent Targ
8253 Cannot put Remote Over Percent Color
8254 Cannot put Remote Under Percent Color
8255 Cannot put Remote Color Goal
8256 Cannot put Remote Over Goal Color
8257 Cannot put Remote Under Goal Color
8258 Cannot put Remote Cars In Lane Color Max
8259 Cannot put Remote Cars In Lane Tone Max
8260 Cannot put Remote Cars In Lane Flash Max
8261 Cannot put Remote Cars In Lane Under Max Color
8262 Cannot put Remote Cars In Lane Over Max Color
8263 Cannot put Remote Standby Interval
8264 Cannot put Alarm Duration
8265 Cannot put Alarm Interval
8266 Cannot put Alarm Goal Index
8267 Cannot put Alarm Mode
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<th>Description</th>
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<td>Cannot put Alarm Lane</td>
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<td>Cannot put Alarm Trigger</td>
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<td>8270</td>
<td>Cannot put Alarm Max Cars</td>
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<td>8271</td>
<td>Cannot put Remote Standby Mode</td>
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<td>8272</td>
<td>Invalid input file string</td>
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<td>8273</td>
<td>Invalid value for remote event</td>
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<td>8274</td>
<td>Violation of rules</td>
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<td>8275</td>
<td>Cannot put Remote Goal Event</td>
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<td>Cannot put Remote Percent Event</td>
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