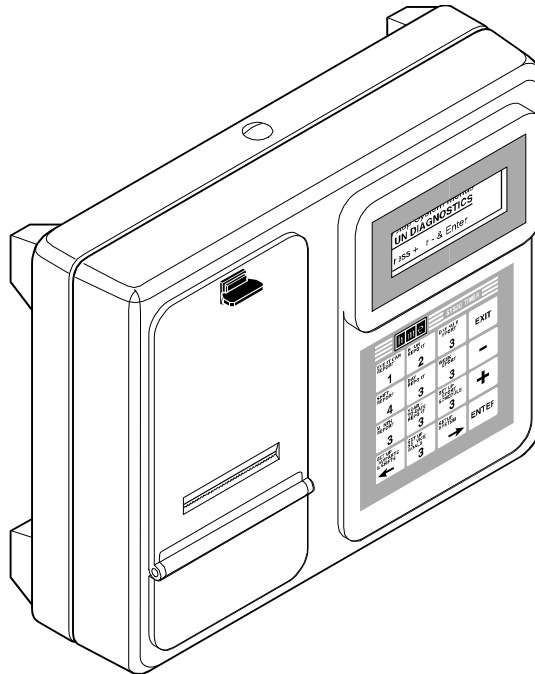


# System 30

## Drive-Thru Timer System



### Operating Instructions

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HM ELECTRONICS, INC.

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## I. GENERAL

**This manual is for firmware version 1.01**

The System 30 is used to measure timing events or service goals at various locations (detection points) in the drive-thru lane. It can monitor timing events at up to six detection points in either one, two or six-lane operations.

The optional remote display units show timing events at selected detection points. The unit can be connected to an external audio alert or strobe light which can be set to sound alert tones or flash when drive-thru customers arrive, and/or when certain service times have been reached. The system can be set up to print various timing event reports automatically or on demand, or to transfer timing data to a PC.

**In the event of an electrical power outage —**

such as from a lightning storm or power generator failure, if you experience problems with your HME equipment after the electricity comes on again, unplug the AC power adapters from their electrical outlets, then plug them back in.

## A. Definitions of Terms

### Time measurement terms:

---

<b>Timing Event:</b>	Any drive-thru event or series of events for which time is measured is a timing event. Possible System 30 timing events are described below.
<b>Lane:</b>	The drive-thru lane.
<b>Queue Time:</b>	The time from a vehicle's departure from the first active detection point until its arrival at the last active detection point.
<b>Total Time:</b>	The time from a vehicle's arrival at the first active detection point until its departure from the last active detection point.
<b>Event Time:</b>	The time from a vehicle's arrival at a specific detection point until its departure from that point.
<b>Greet Time:</b>	The time from a vehicle's arrival at the greet detection point until the audio greeting begins.

### Other terms:

---

<b>Dayparts:</b>	Up to 12 time periods (numbered 1-12) can be entered into the system to break the day into segments. Each daypart automatically ends at the beginning of the following daypart. Some periods usually represented as dayparts are: breakfast, mid-morning, lunch, mid-afternoon, dinner, evening and late-night hours.
<b>Service Goals:</b>	Service goals are associated with dayparts and can be set for any event in the system. These can then be tracked by entering master and individual event daypart goals.
<b>Position:</b>	A location at which a measurement of time is taken. Detection positions typically used with the System 30 are alert, menu board, cashier window, service window and optional waiting area.
<b>Detection Point:</b>	The electrical connection for a vehicle detector. Each detection point may provide the signal to one or more detection positions.
<b>Repeat:</b>	The time (in seconds) between repeating alert tones that can be set for any daypart goals.
<b>Cars in Lane:</b>	The number of cars that have arrived at the first active detection point but not yet left the last active detection point.

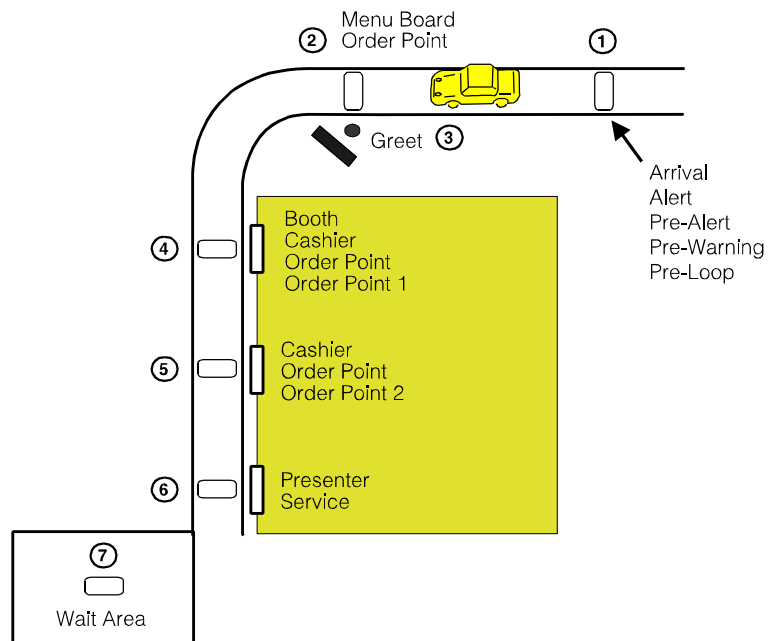
## B. Drive-Thru Store Types

To understand the timing events measured by the System 30 at your location, find which of the following illustrations (Figure 1 or 2) most closely matches the store requirements. The diagrams account for several options for single or multiple lane installations.



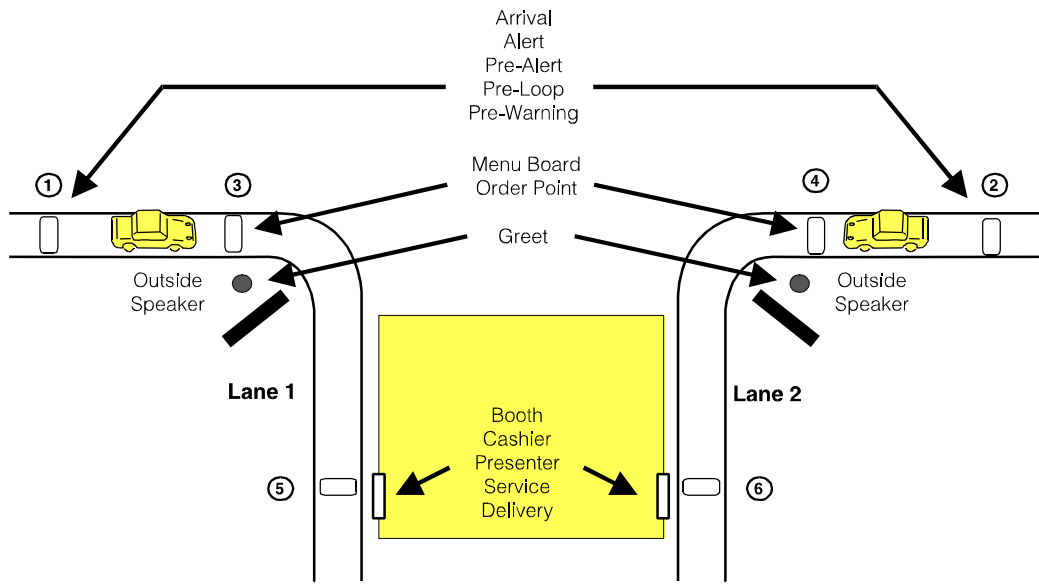
*The names (Booth, Arrival, Menu, etc.) Listed on the diagrams indicate which pre-programmed system names can be assigned to each of the detection points. See pages 76-83 for more information about detection point names.*

### What's in a Name?



**Figure 1. One-lane drive-thru layout**

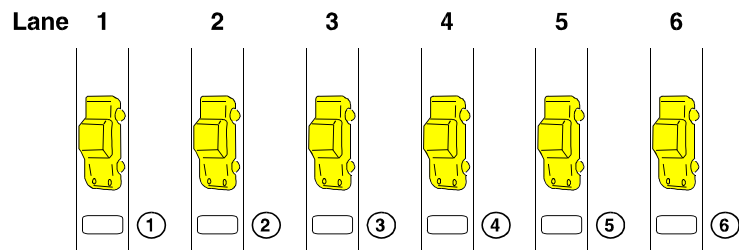
**NOTE:** In a one-lane location, you can select up to 6 of the 7 detection options shown.



**Figure 2. Two-lane drive-thru layout**

The Timer can measure individual events (time from arrival at a specific detection point until departure from that point) and transaction events such as lane time (time from leaving the first detection point until arrival at the last detection point) and Total time (time from arrival at first detection point until departure from last detection point).

The system also tracks the number of cars in the lane, which is defined as the number of cars that have left the first detection point that is ON but have not left the last detection point that is ON.



**Figure 3. Six-lane drive-thru layout**



## II. EQUIPMENT IDENTIFICATION AND FEATURES

### A. Control Unit

The control unit is the electronic heart and brain of the System 30 timer system. You will need to become familiar with it in order to get the most value from using the system. The main features of the control unit are shown in Figures 4 and 5.

#### 1. Main Features

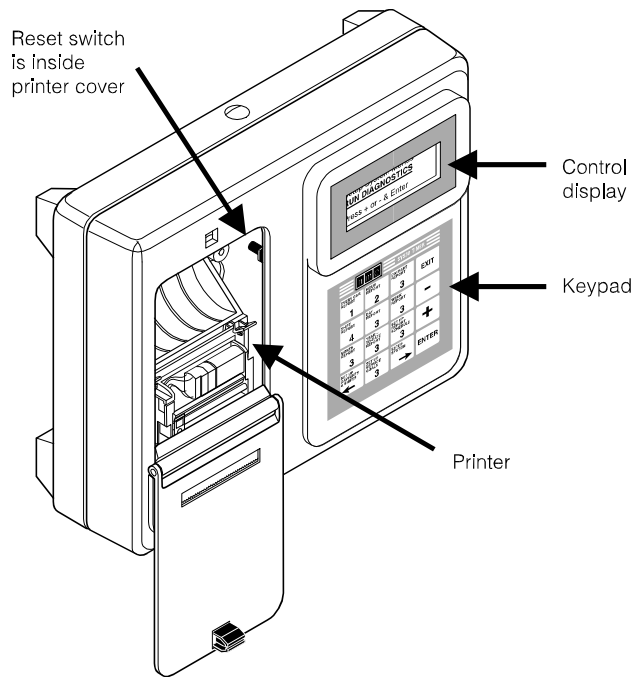


Figure 4. Main features of the System 30 control unit

- ! The **control display** shows the menus and keypad entries when the system is being set up and in daily operation.
- ! The **keypad** is used to enter setup information into the system and to request printed reports. It has 16 number and symbol keys, and provides one-touch access to many system functions and reports.
- ! The **printer** is used to print reports of timing event measurements. Inside the printer cover are instructions for loading or reordering printer paper.
- ! The **reset switch** is used to reset the system. It is mounted on the main circuit board, and can be reached by opening the printer cover.
- ! The **paper feed button** is used to load paper. The printer will advance ten lines every time the paper feed button is pressed.

## 2. Keypad

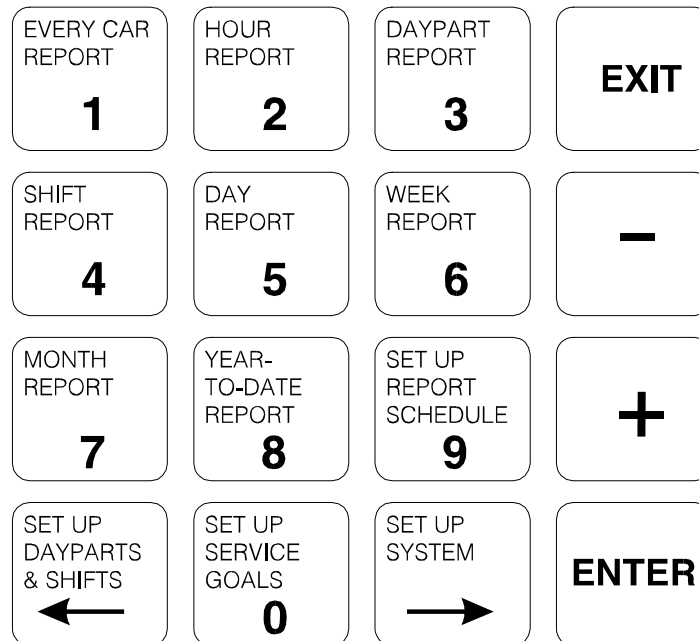


Figure 5. System 30 control unit keypad

- ! The **0-9** keys are used to set up the system and input numbers.
- ! The **EVERY CAR, HOUR, DAYPART, SHIFT, DAY, WEEK, MONTH** and **YEAR-TO-DATE** report keys are used to print these reports on demand.
- ! The **←** key is used to move *back* one field in an entry display.
- ! The **→** key is used to move *forward* one field in an entry display.
- ! The **ENTER** key is used to accept an entry in a display *field* and move to the next field.
- ! The **EXIT** key is used to accept the entries you have input, and to exit the current display. It is also used to stop the printer.
- ! The **,** key is used to move *back* in a list of selections, or sometimes to move to a previous display.
- ! The **[** key is used to move *ahead* in a list of selections, or sometimes to advance to the next display.

## B. R30 Remote Display Unit

The R30 has a 1 inch (25.4 mm) LED which operates with a System 30 timer to display any one of eight timing events.

Up to four R30 Remote Display Units can be connected to the System 30.

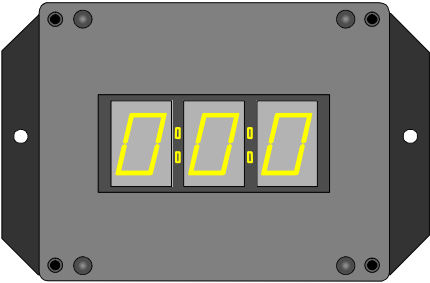


Figure 6. R30 Remote Display Unit

### III. NORMAL OPERATION AND USE

If the control unit is plugged into an electrical outlet, the system will always be in operation. There is no ON/OFF switch on the control unit.

#### A. Typical Operation

Typical operation of the System 30 will include the following activities. More detailed explanations and instructions are given later in this manual. Refer to the Table of Contents for page references.

<b>Typical Operation Activity</b>	<b>What it Does</b>
Printing the following types of On-Demand Reports  1 – Mini Reports  2 – Status Reports	You can print any one of 8 reports with one touch of the keypad.  Mini Reports give you one-touch information about system and staff activity.  Status Reports give you one-touch information about system status.
Resetting vehicle detector or Deleting cars from records	Under certain traffic conditions, you will want to reset a vehicle detector or delete a car from the system records.
Modifying the System Settings	As conditions and seasons change, you may want to modify the settings that were input at the time of installation.
Setting Dayparts	Set the number of Dayparts and when they begin.
Setting Date and Time	Set the current date and time for the system.
Resetting the Defaults	Reset all system entries to the factory settings.

The following are typical display characteristics you will experience during routine operation of the System 30.

<b>Display Characteristic</b>	<b>What it Means</b>
Blinking Field	On all displays, the current field that you can input data to will blink. The number of underline spaces indicates how many characters you can input to that field.
Minutes	All schedule minutes are 00 through 59.
Seconds	All programming seconds are 00 through 59.
Timeout	All displays will return to the Standby display after 5 minutes with no activity.
Action Hints	The bottom line of each display provides keying prompts. "Press + or - & Enter" will appear for all name entries. "Press # keys & Enter" will appear for all numeric fields.
System Defaults	All displays are set to factory default settings when the system is shipped. The system can be reset to the system defaults at any time (see page 85).

## B. Standby Display

The Standby display is the normal operating display. The display is different for one, two or six-lane locations.

The following symbols will appear on the display during routine operation of the System 30.

Symbol	What it Means
•	The detection point is active
–	The detection point is inactive
N	The detection point is OFF (not available)
G	The detection point is GREET INPUT

The one-lane Standby display is shown below:

12: 34: 12P	• • N N N N
Service Time =	01: 32
Cars in Lane =	6
Total Time =	2. 32

Service Time = Service time for the last car through  
 Cars in Lane = The number of cars currently in the lane  
 Total Time = Total time for the last car through

The two-lane Standby display is shown below:

12: 34: 12P	• • • – N N
Serv.	1: 32 1. 22
Lane	3 4
Total	2. 32 2. 59

The six-lane Standby display is shown below:

12: 34: 12P	• • • – – –
Lane Service Time	
1=2: 22	2=1: 22 3=4: 02
4=0: 00	5=0: 00 6=0: 00

**NOTE:** The 6-lane display shows only the total Service Time for each lane. It does *not* show the number of cars in the queue.

## C. Viewing Mini Reports

Mini Reports give you a quick view of system activity.

From the Standby display, press the +/- keys until the desired Mini Report is displayed. If you continue to press the +/- keys, you will also see the system Status reports, which are described in the next section of this manual.

12: 34: 12P • • N N N N
Service Time = 01: 32
Cars in Lane = 6
Total Time= 2. 32



*You don't need to enter a Report Access Code or a Manager's Code to view a Mini Report.*

### 1. Current Hour Mini Report: (for one-lane operation only)

This report shows the average service time, average number of cars in the lane, and the total number of customers served for the current hour.

Current Hour:
Avg. Service= 01: 32
Avg. Cars in Lane= 6
# Customers= 145

### 2. Current Daypart Mini Report: (for one-lane operation only)

This report shows the average service time, average number of cars in the lane, and the total number of customers served for the current daypart.

Current Daypart:
Avg. Service= 01: 32
Avg. Cars in Lane= 6
# Customers= 145

### 3. **Current Shift Mini Report:** (for one-lane operation only)

This report shows the average service time, average number of cars in the lane, and the total number of customers served for the current shift.

Current Shift:	
Avg. Service=	01: 32
Avg. Cars in Lane=	6
# Customers=	145

### 4. **Current Day Mini Report:** (for one-lane operation only)

This report shows the average service time, average number of cars in the lane, and the total number of customers served for the current day.

Current Day:	
Avg. Service=	01: 32
Avg. Cars in Lane=	6
# Customers=	145

### 5. **Six Lane Mini Report:** (for six-lane operation only)

This report shows the current average time for each lane in a six-lane location for the current day.

Lane Activity:	
1= 0: 12	2= OFF
3= 0: 33	4= OFF
5= 1. 22	6= OFF

### 6. **Two Lane Mini Report:** (for two-lane operation only)

This report shows the average time for three detection points in each of the lanes of a two-lane location for the current day.

Lane ONE:	Lane TWO:
1= 0: 12	2= 0: 14
3= 0: 33	4= 0: 21
5= 0: 00	6= 0: 00



## D. Viewing Status Reports

Status reports let you check the system's performance.

From the Standby display, press the +/- keys until the desired Status report is displayed.

```
12: 34: 12P •• N N N N
Service =          01: 32
Cars in Lane =     6
Total Time=        2. 32
```



*You don't need to enter a Report Access Code or a Manager's Code to view a Status Report.*

- 1. System Status Report** indicates the copyright date for the system, and may flash a LOW BATTERY or REMOTE CONNECTING notice.

```
Copyri ght © 1997
HM Electronics Inc.
CURRENT DATE/TIME
MAR 10, 97 07: 51: 45A
```

```
Copyri ght © 1997
HM Electronics INC.
CURRENT DATE/TIME:
LOW BATTERY
```

```
Copyri ght © 1997
HM Electronics INC.
CURRENT DATE/TIME:
REMOTE CONNECTING
```

- 2. System Resets Report** shows how many times the system and its detectors have been reset from the time the system was setup. It also shows the number of cars deleted. Resetting the detectors and deleting the first car in the lane are done through the Drive-Thru Manager display. See page 33.

```
Manual Counts:
System Resets=5
VDB Reset = 10
Cars Deleted =15
```

- 3. Cars Deleted Report** shows the count of cars automatically deleted, if they were drive throughs or if the maximum number of cars in the lane was exceeded.

A drive through occurs when a customer comes to the Menu or Alert detector, and leaves without ordering. The system can be set up to discard drive throughs in the Discard < 4 Sec Vehicles display (see page 70).

When your system was set up, the installer entered a "maximum number of cars in the lane" based on the length of the drive-thru lane and the size of the average car. You can modify this setting through the Set Up Lane display (see page 72).

Total Auto Deleted: Pul louts = 20 Maxi mum Cars In Lane = 18
--

- 4. Power-up Date and Software Version Report** shows the current date, the date the system was powered up, and the software version currently running.

Confi g:	MAR 06, 97
Pwr Up:	MAR 10, 97
F/W Date:	MAR 06, 97
F/W Ver:	1.00

## E. Printing On-Demand Reports

If you want to print any of the system reports, on demand, follow the instructions in this section. If you want to print the program entries you have made for the system, follow the instructions on page 61.

### Entering Your Access Codes

Access to the System 30 for making system setup changes and printing reports is controlled by Access Codes.

- ! A Report Code is needed for printing reports.
- ! A Manager's Code can be used to change the system setup or print reports.
- ! If a report has been printed in the past 5 minutes, you will not need to enter the Report Code again in order to print another report.
- ! If a report has been printed or system changes made with the Manager's Code in the past 5 minutes, you will not need to enter a code again in order to print a report.

Press the key for the report that you want to print. If a report has not been printed in the last five minutes, use the number keys to enter a Manager's or Report Access Code.

```
Enter Reports Access  
Code: _ _ _ _ _  
  
Press ENTER
```

You will have three chances to enter the correct code. After the third failed attempt, the system will display the following message and lock the keypad for 5 minutes:

```
Maximum Access Code  
Trys Exceeded!  
Key Pad Locked For 5  
Minutes!
```

**NOTES:**

- ! You can override the Access Code Error by pressing the » and ° keys at the same time.
- ! All On-Demand reports will initially display the current period.
- ! If the display allows printing of multiple dates or periods, the system will print individual reports for each period of each date. The data will *not* be combined into one report.
- ! All dates must be between the power-up date and the current date.

Instructions for printing the reports can be found on the following pages:

**Report**

Every-Car report . . . . . go to page 17  
 Hour report . . . . . go to page 19  
 Daypart report . . . . . go to page 21  
 Shift report . . . . . go to page 23  
 Day report . . . . . go to page 25  
 Week report . . . . . go to page 27  
 Month report . . . . . go to page 29  
 Year-to-Date report . . . . . go to page 31



*Some reports require beginning and ending dates and times, and therefore are not available until the ending date or time is past.*

*To stop a report from printing, press the key for that report again. When you see the display for that report, STOP will be flashing. Press ENTER while STOP is flashing. The report will stop printing.*

**System 30 maximum vehicle data storage capability**

Detection points (except Alert) used for each lane						
	1	2	3	4	5	6
One Lane	14,000	9,800	7,500	6,000	5,100	4,400
Two Lane	14,000	9,800	7,500	—	—	—
Six Lane	14,000	—	—	—	—	—

Maximum cars can be retrieved by the Every-Car, Hour, and Daypart & Shift Report.

Every Car, Hour, and Daypart & Shift Reports can be retrieved from cars stored in the memory. If the System 30 XM30 Memory Expansion Kit has been installed you can store up to four times as many cars.

Day, Week, Month and Year-to-Date Reports can be retrieved up to one year (365 days).

# 1. Every-Car Report

This report will show the date and time of the report, along with the range of dates that you select. It will show the last two detection points "ON," and the Total Time for each car.

**Step 1** Press the EVERY CAR REPORT key to set up the report.



```
Every Car Report:
Fm: JAN, 01, 12: 00A
To: JAN, 01, 12: 00A
Print Report: START
```

**Step 2** Use the number keys to enter the dates and times, Fm (From) when To when, for the Every Car Report. **Use the +/- keys to set each time for AM or PM.** The default is the current time.

**Step 3** Press **ENTER** after entering both date and time values. **START** will flash.

**Step 4** When **START** is flashing, press **ENTER** to print the report.

*The Standby display will appear while the report is printing.*

```
12: 34: 12P   . . . ---
Service Time = 01: 32
Cars in Lane =      6
Total Time =    2. 32
```

*r* If you want to stop the report, press the report key again. **STOP** will be flashing. Press **ENTER** to stop printing.

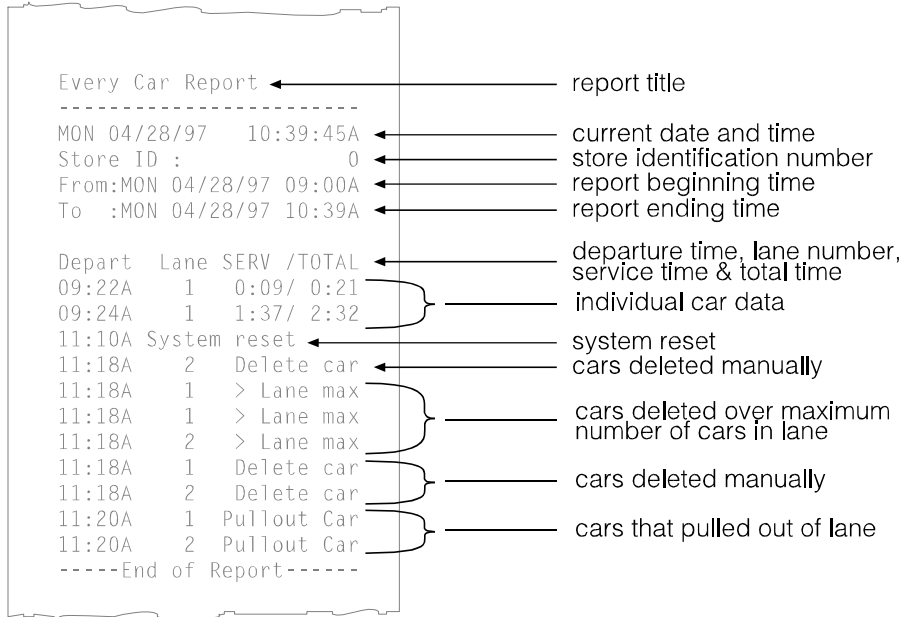
*r* If you want to print another report, press the key for the new report.



*Remember! You can stop printing any report by pressing the key for the report. The report screen will appear, and STOP will be flashing. Just press **ENTER** when STOP is flashing and the report will stop printing!*

**NOTE:** This report is usually used for trouble shooting problems.

**Example:**



## 2. Hour Report

This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, Cars serviced within each goal, and Longest times for Menu, Service and Total times. This report also shows Total Pullouts, Average queue Time, Average Cars in the Lane, and system information (Power Fails, System Resets and VDB Resets).

**Step 1** Press the HOUR REPORT key to set up the report.



```
Hour Report: 10A
From: MAR, 08
To: MAR, 08
Print Report: START
```

**Step 2** Use the number and +/- keys to enter the start of the Hour to print and the date range.  
**Use the +/- keys to set each time for AM or PM.**

**Step 3** When START is flashing, press **ENTER** to print the report.

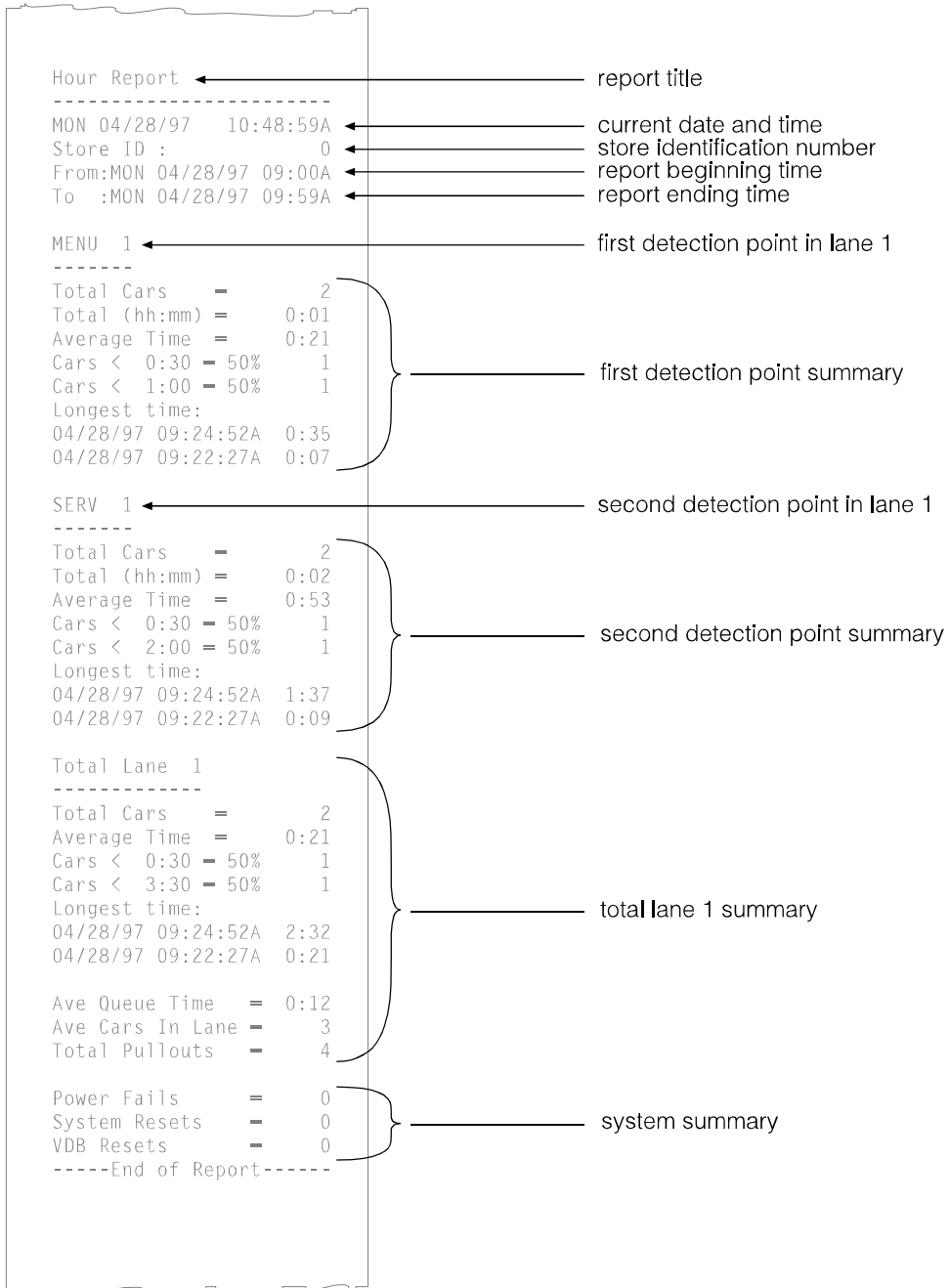
*The Standby display will appear while the report is printing.*

```
12: 34: 12P   •••---
Service Time = 01: 32
Cars in Lane =    6
Total Time =   2. 32
```

*r* If you want to stop the report, press the report key again.  
STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**Example:**





### 3. Daypart Report

This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, Cars serviced within each goal, and Longest times for Menu, Service and Total times. This report also shows Total Pullouts, Average Lane Time, average Cars in the Lane, and system information (Power Fails, System resets and VDB Resets).

**Step 1** Press the DAYPART REPORT key to set up the report.



```
Daypart Report:
Daypart: 02, 09:00A
Dates: JAN, 14 JAN, 14
Print Report: START
```

**Step 2** Use the number and +/- keys to enter the Daypart number to be printed and the date range.  
The system will automatically display the start time of the selected Daypart.

**Step 3** When START is flashing, press **ENTER** to print the report.

*The Standby display will appear while the report is printing.*

```
12:34:12P   •••---
Service Time = 01:32
Cars in Lane = 6
Total Time = 2.32
```

*r* If you want to stop the report, press the report key again.  
STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**Example:**

```

Daypart Report #1
-----
MON 04/28/97 11:04:12A
Store ID : 0
From:MON 04/28/97 06:00A
To :MON 04/28/97 11:04A

MENU 1
-----
Total Cars = 2
Total (hh:mm) = 0:01
Average Time = 0:21
Cars < 0:30 = 50% 1
Cars < 1:00 = 50% 1
Longest time:
04/28/97 09:24:52A 0:35
04/28/97 09:22:27A 0:07

SERV 1
-----
Total Cars = 2
Total (hh:mm) = 0:02
Average Time = 0:53
Cars < 0:30 = 50% 1
Cars < 2:00 = 50% 1
Longest time:
04/28/97 09:24:52A 1:37
04/28/97 09:22:27A 0:09

Total Lane 1
-----
Total Cars = 2
Average Time = 1:26
Cars < 0:30 = 50% 1
Cars < 3:30 = 50% 1
Longest time:
04/28/97 09:24:52A 2:32
04/28/97 09:22:27A 0:21

Ave Queue Time = 0:12
Ave Cars In Lane = 3
Total Pullouts = 4

Power Fails = 0
System Resets = 0
VDB Resets = 0
-----End of Report-----

```

report title  
 current date and time  
 store identification number  
 report beginning time  
 report ending time  
 first detection point in lane 1  
 first detection point summary  
 second detection point in lane 1  
 second detection point summary  
 total lane 1 summary  
 system summary

## 4. Shift Report

This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, Cars serviced within each goal, and Longest times for Menu, Service and Total times. This report also shows Total Pullouts, Average Lane Time, average Cars in the Lane, and system information (Power Fails, System resets and VDB Resets).

**Step 1** Press the SHIFT REPORT key to set up the report.



```
Shi ft Report:
Shi ft: _3    09: 00A
From: JAN, 14 ToJAN, 14
Print Report: START
```

**Step 2** Use the number and +/- keys to enter the Shift to be printed and the date range. The system will automatically display the start time of the selected Shift.

**Step 3** When START is flashing, press **ENTER** to print the report.

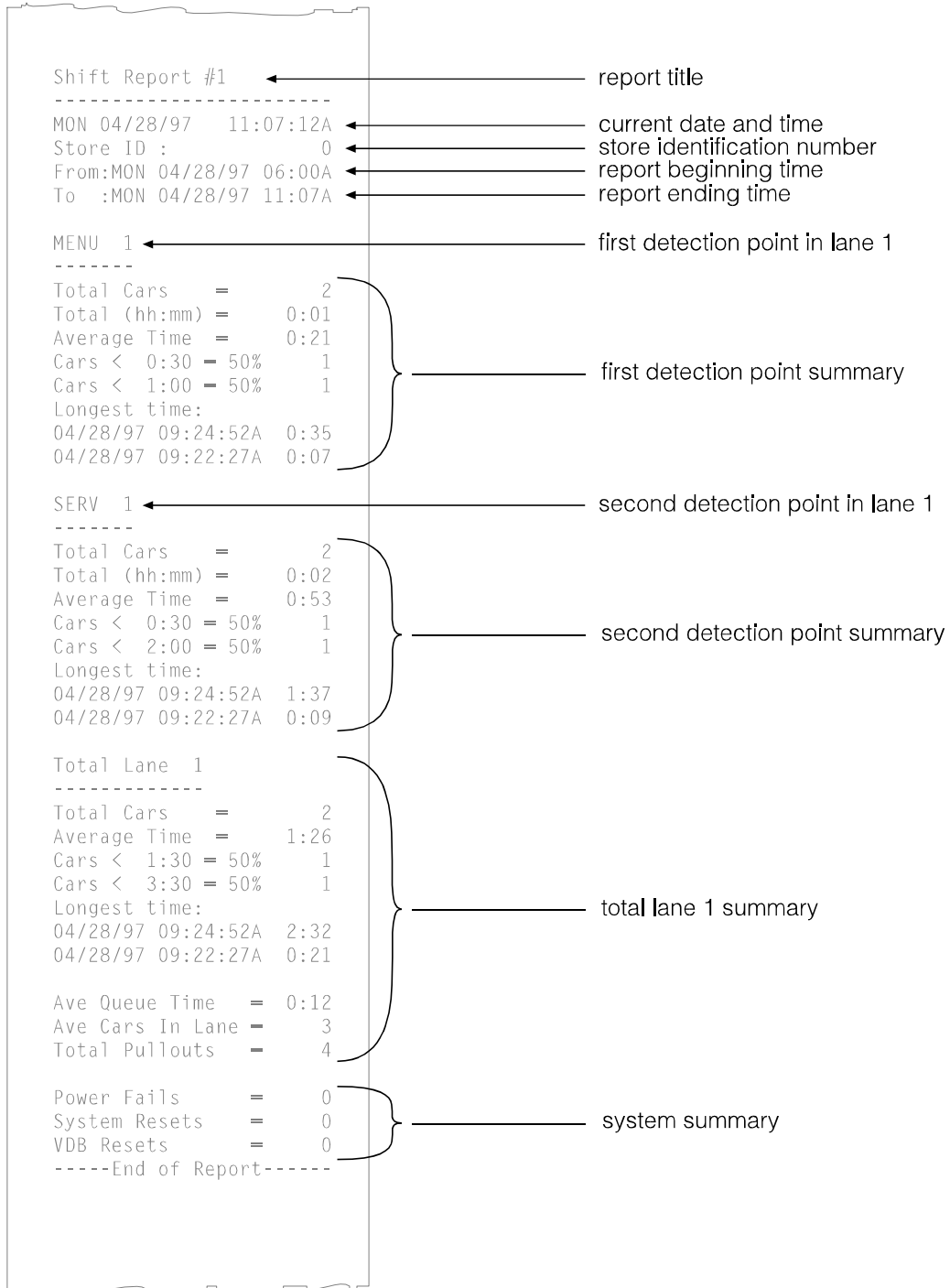
*The Standby display will appear while the report is printing.*

```
12: 34: 12P   •••---
Service Time = 01: 32
Cars in Lane =    6
Total Time =   2. 32
```

*r* If you want to stop the report, press the report key again. STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**Example:**



## 5. Day Report

This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, and Cars serviced within each goal. This report also shows Total Pullouts, Average Lane Time, Average Cars in Lane, and system information (Power Fails, System resets and VDB Resets).

**Step 1** Press the DAY REPORT key to set up the report.



```
Day Report:
  From: MAR, 08
  To:   MAR, 08
Print Report: START
```

**Step 2** Use the +/- and number keys to enter the date range.

**Step 3** When START is flashing, press **ENTER** to print the report.

*The Standby display will appear while the report is printing.*

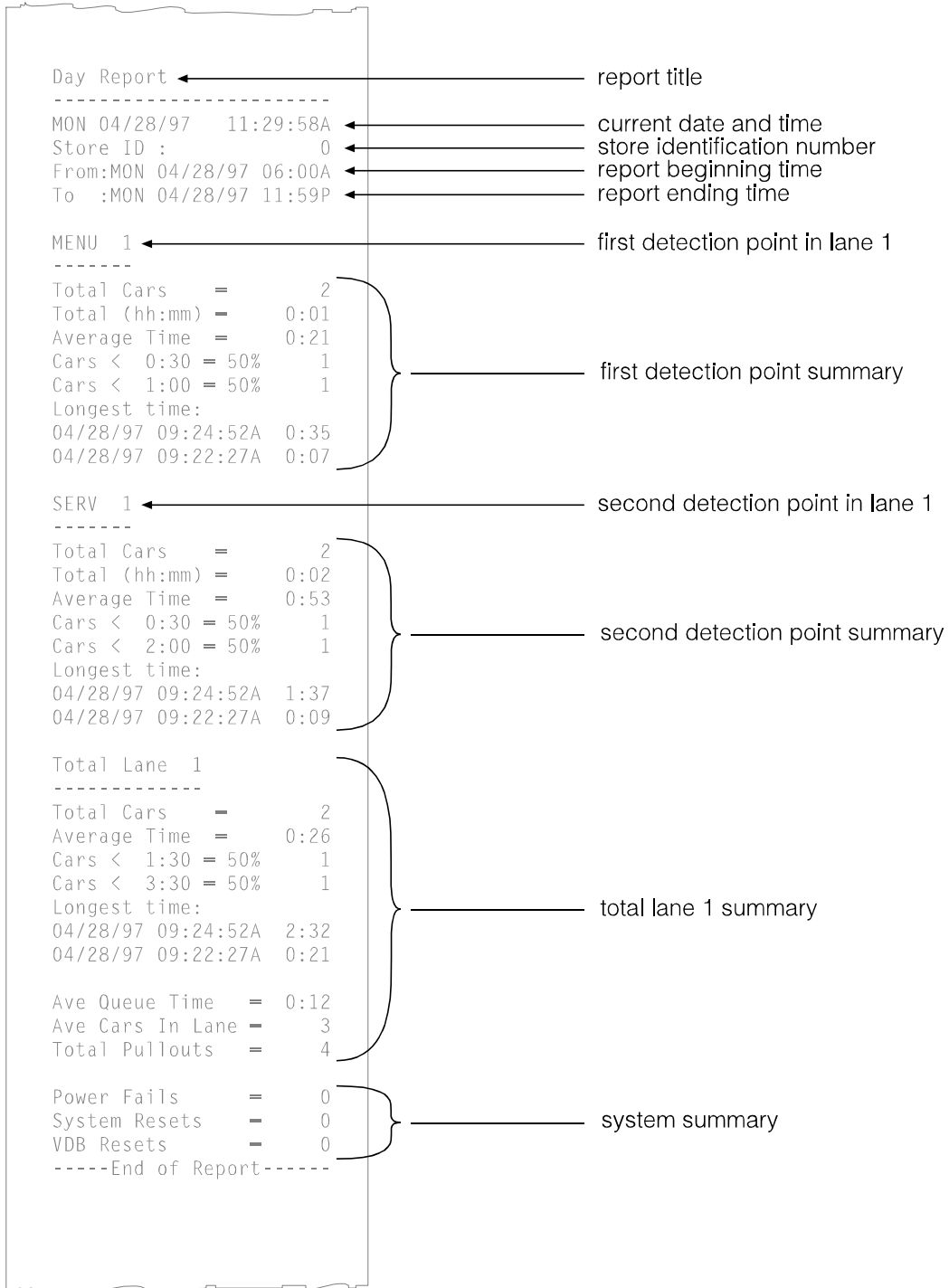
```
12: 34: 12P   . . . ---
Service Time = 01: 32
Cars in Lane =    6
Total Time =   2. 32
```

*r* If you want to stop the report, press the report key again.  
STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**NOTE:** Day Reports can be retrieved for up to one year (365 days) back.

**Example:**



## 6. Week Report

This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, and Cars serviced within each goal. This report also shows Total Pullouts, Average Lane Time, Average Cars in Lane, and system information (Power Fails, System resets and VDB Resets).

**Step 1** Press the WEEK REPORT key to set up the report.



```
Week Report:
Fr: MAY, 07, 97
To: MAY, 13, 97
Print Report: START
```

**Step 2** Use the +/- and number keys to enter the beginning date.  
The system will automatically display the end date.

**Step 3** When START is flashing, press **ENTER** to print the report.

*The Standby display will appear while the report is printing.*

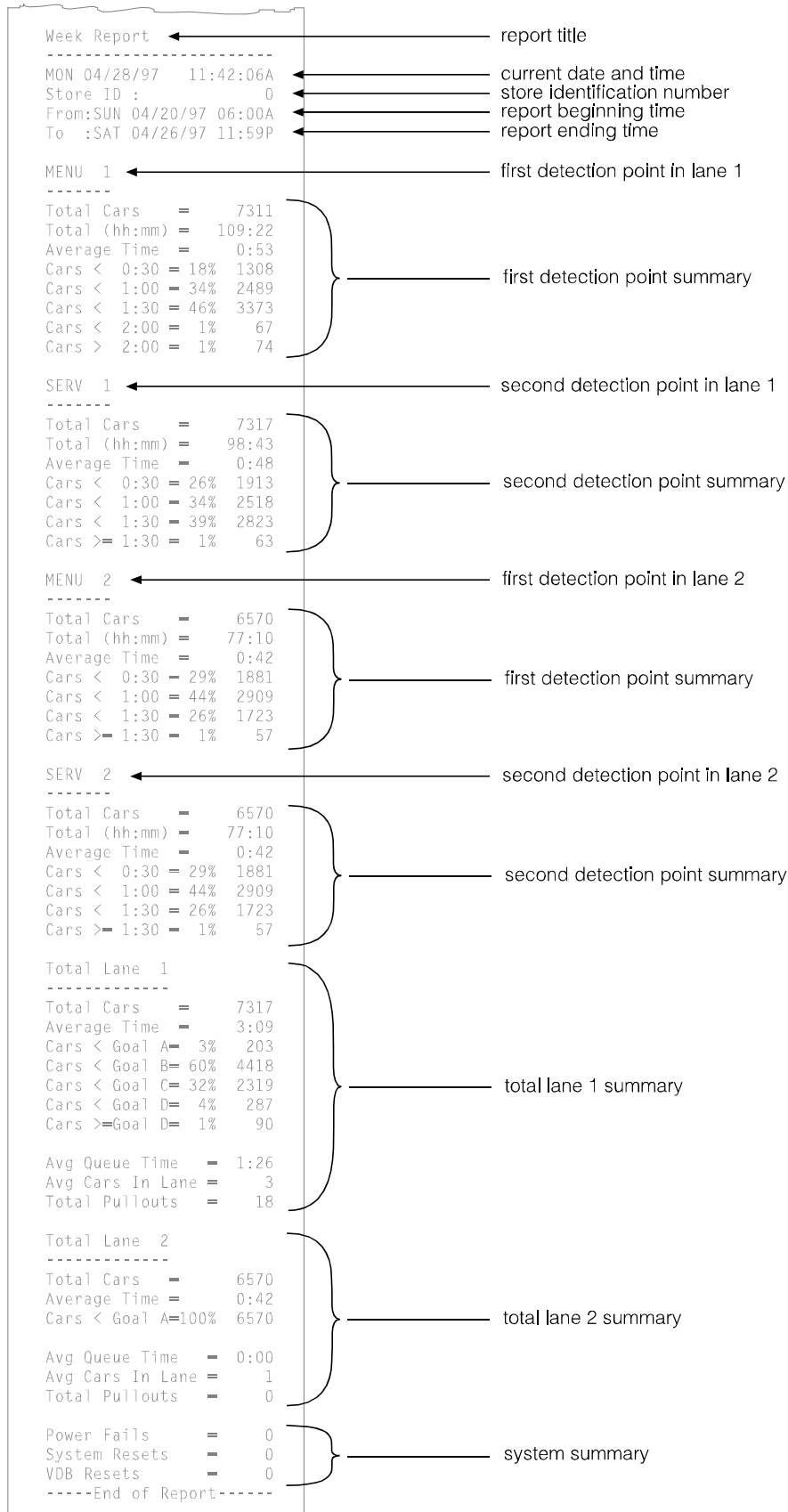
```
12: 34: 12P   • • • ---
Service Time = 01: 32
Cars in Lane =      6
Total Time =      2. 32
```

*r* If you want to stop the report, press the report key again.  
STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**NOTE:** Week Reports can be retrieved for up to one year (365 days) back.

**Example:**





## 7. Month Report

This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, and Cars serviced within each goal. This report also shows Total Pullouts, Average Lane Time, Average Cars in Lane, and system information (Power Fails, System resets and VDB Resets).

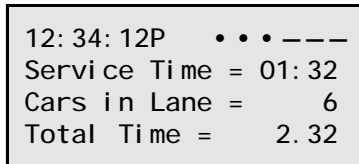
**Step 1** Press the MONTH REPORT key to set up the report.



**Step 2** Use the +/- and number keys to enter the month and year for the report.  
The date must be after the power-up date.

**Step 3** When START is flashing, press **ENTER** to print the report.

*The Standby display will appear while the report is printing.*



*r* If you want to stop the report, press the report key again.  
STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**NOTE:** Month Reports can be retrieved for up to one year (365 days) back.

**Example:**

```

Month Report
-----
MON 04/28/97 11:42:06A
Store ID : 0
From:SAT 03/01/97 06:00A
To :MON 03/31/97 11:59P

MENU 1
-----
Total Cars = 7311
Total (hh:mm) = 109:22
Average Time = 0:53
Cars < 0:30 = 18% 1308
Cars < 1:00 = 34% 2489
Cars < 1:30 = 46% 3373
Cars < 2:00 = 1% 67
Cars > 2:00 = 1% 74

SERV 1
-----
Total Cars = 7317
Total (hh:mm) = 98:43
Average Time = 0:48
Cars < 0:30 = 26% 1913
Cars < 1:00 = 34% 2518
Cars < 1:30 = 39% 2823
Cars >= 1:30 = 1% 63

MENU 2
-----
Total Cars = 6570
Total (hh:mm) = 77:10
Average Time = 0:42
Cars < 0:30 = 29% 1881
Cars < 1:00 = 44% 2909
Cars < 1:30 = 26% 1723
Cars >= 1:30 = 1% 57

SERV 2
-----
Total Cars = 6570
Total (hh:mm) = 77:10
Average Time = 0:42
Cars < 0:30 = 29% 1881
Cars < 1:00 = 44% 2909
Cars < 1:30 = 26% 1723
Cars >= 1:30 = 1% 57

Total Lane 1
-----
Total Cars = 7317
Average Time = 3:09
Cars < Goal A= 3% 203
Cars < Goal B= 60% 4418
Cars < Goal C= 32% 2319
Cars < Goal D= 4% 287
Cars >=Goal D= 1% 90

Avg Queue Time = 1:26
Avg Cars In Lane = 3
Total Pullouts = 18

Total Lane 2
-----
Total Cars = 6570
Average Time = 0:42
Cars < Goal A=100% 6570

Avg Queue Time = 0:00
Avg Cars In Lane = 1
Total Pullouts = 0

Power Fails = 0
System Resets = 0
VDB Resets = 0
-----End of Report-----

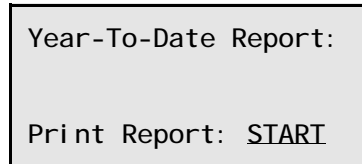
```

report title  
 current date and time  
 store identification number  
 report beginning time  
 report ending time  
 first detection point in lane 1  
 first detection point summary  
 second detection point in lane 1  
 second detection point summary  
 first detection point in lane 2  
 first detection point summary  
 second detection point in lane 2  
 second detection point summary  
 total lane 1 summary  
 total lane 2 summary  
 system summary

## 8. Year-To-Date Report

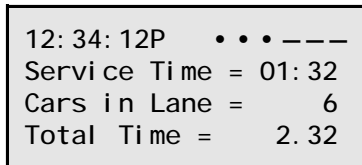
This report will show the date and time of the report, the Store ID, along with counts for Total Cars, Total Hours & Minutes, Average Time, and Cars serviced within each goal. This report also shows Total Pullouts, Average Lane Time, Average Cars in Lane, and system information (Power Fails, System resets and VDB Resets).

**Step 1** Press the Year-To-Date Report key to run the report.



**Step 2** When START is flashing, press **ENTER** to print the report.

*The Standby display will appear while the report is printing.*



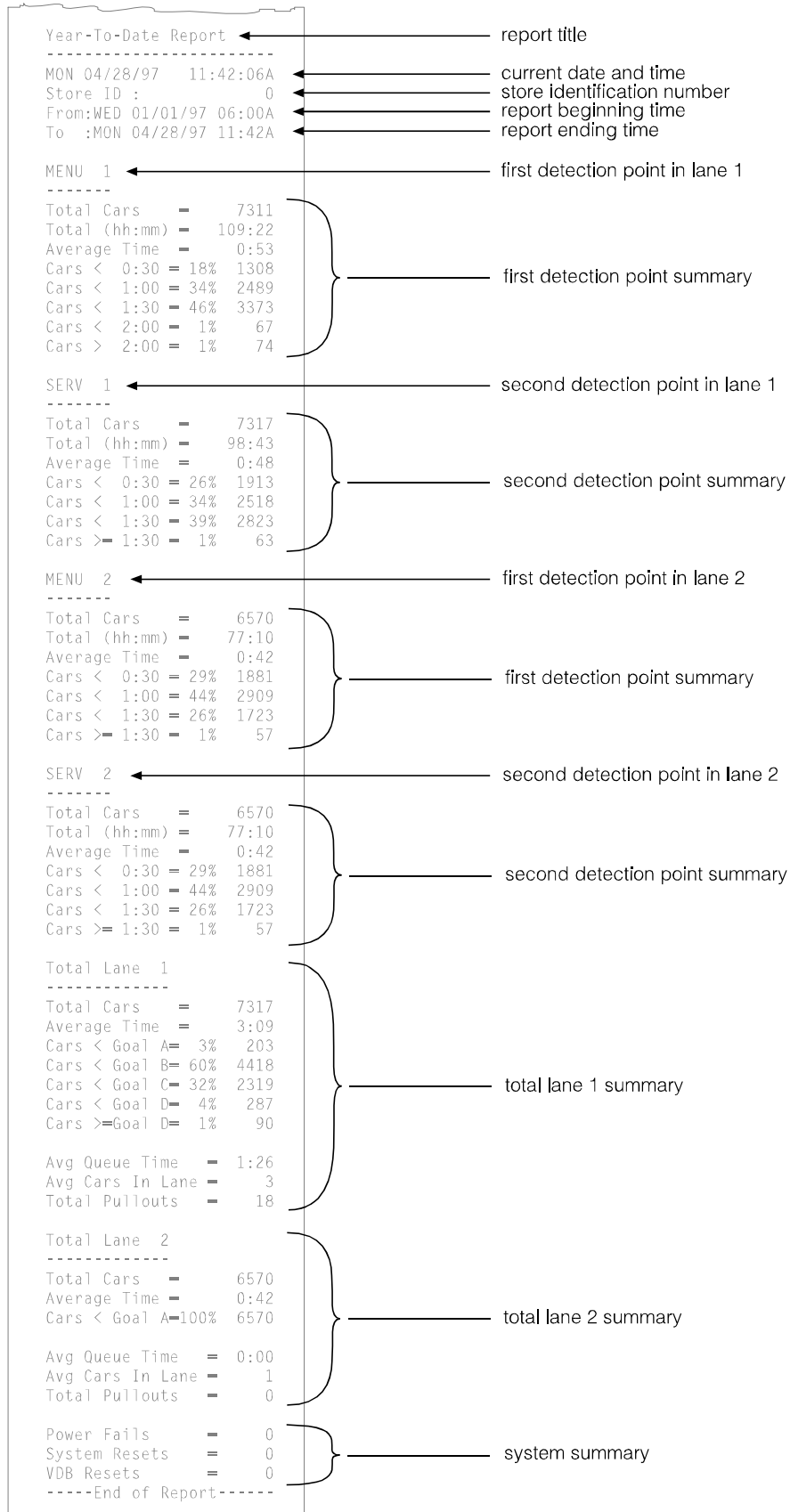
```
12: 34: 12P . . . ---
Service Time = 01: 32
Cars in Lane = 6
Total Time = 2. 32
```

*r* If you want to stop the report, press the report key again.  
STOP will be flashing. Press **ENTER** to stop printing.

*r* If you want to print another report, press the key for the new report.

**NOTE:** Year-To-Date Reports can be retrieved for up to one year (365 days) back.

**Example:**

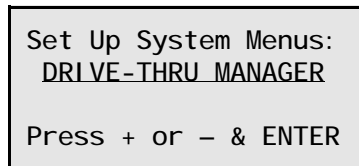
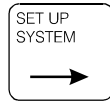


## F. Drive-Thru Manager

Certain conditions may require that the system internal detectors be reset, or that the first car in the lane be deleted.

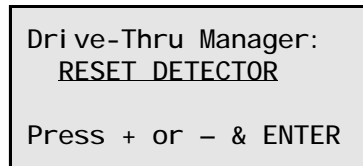
- ! Vehicle detectors need to be reset when a car has left a location but the detector is still on.
- ! The first car in the lane should be deleted when cars in the lane are out of sequence. This can happen if the detector has a problem, if cars with trailers have gone through the lane, or if other unusual events occur.

**Step 1** When you need to reset the detectors or delete the first car in the lane, begin by pressing the Set Up System key. The Set Up System Menu display will appear.



**Step 2** Press +/- until DRIVE-THRU MANAGER appears on the Set Up System Menu display.

**Step 3** Press **ENTER**. The Drive-Thru Manager display will appear.



This display offers two options:

Option	Definition
RESET VEHICLE DETECTOR	Reset the internal vehicle detector(s).
DELETE FIRST CAR	Deletes the first (oldest) car from the current lane.

**Step 4** Press +/- to choose one of these two actions. Press **ENTER** to view the display you have chosen.

- r* If you want to reset the detectors, press **ENTER** when RESET VEHICLE DETECTORS appears on the Drive-Thru Manger display. The system will then return to the Set Up System Menus display.

**Note:** This should only be done when no vehicle is on the loop.

Press ENTER to:  
RESET VEHI CLE  
DETECTOR(S)

- r* If you choose DELETE FIRST CAR, the Delete First Car display will appear.
- r* If you are operating multiple lanes, use the number keys to choose which lane to delete the car in.

**Step 5** Press **ENTER** to delete the first car in the lane.






DELETE FIRST CAR IN  
LANE: 1  
Press # Keys & ENTER

**Step 6** Press **ENTER** to perform either operation, and then return to the Standby display.

## G. Modifying the System Settings

The basic System 30 setups were done at the factory or by the installer, and should not normally need to be changed. However, if it becomes necessary to reset any of the basic system settings, follow the instructions in this section.

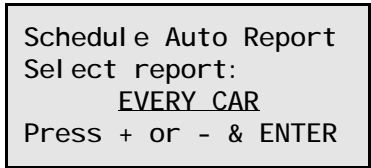
The system's setup can be changed by pressing the Setup keys on the keypad.

Key	Action	Page
	Press this key to set up the Report Schedule. You can schedule all of the system reports to print automatically.	36
	Press this key to set up the Dayparts and Shifts. You can break the day into 12 Dayparts, and track activity for each of them. You can set up the store in up to 3 shifts.	44
	Press this key to set up your Service Goals. The system can track a variety of timing events, and you can establish goals for each of them. You can also set the system to sound a tone or flash an alert when service goals times have been exceeded. This key also allows you to set up the Remote Display Event Tone, Flash sequence, Standby Mode, and Alarms.	48
	Press this key to set the current Date & Time, the Store Hours, set up the Accounting, and change the Report or Manager Access Code.	55
	Press this key to reconfigure the initial system installation parameters (the system setup). This can include detection point assignments and other basic system settings.	69

# 1. Schedule Your Automatic Reports

You can set the system to print any of the system reports automatically.

**Step 1** Press **EXIT** to return to the Standby screen. Press the **SET UP REPORT SCHEDULE** key. The Schedule Auto Report display will appear.



This display can be used to schedule the following reports: EVERY CAR, HOUR, DAYPART, SHIFT, DAY, WEEK, MONTH and YEAR-TO-DATE.

### Report

Every-car report .....	go to page 37
Hour report .....	go to page 38
Daypart report .....	go to page 39
Shift report .....	go to page 40
Day report .....	go to page 41
Week report .....	go to page 42
Month report .....	go to page 42
Year-to-date report .....	go to page 43

**Step 2** Press the +/- keys to select the report that you want to schedule. Press **ENTER** when the desired report display appears.



## Schedule Every-Car Report

**Step 1** Press +/- until EVERY CAR REPORT appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
EVERY CAR REPORT
Press + or - & ENTER
```

**Step 2** Press ENTER. The Every Car Report display will appear. The default is OFF.

```
Every Car Report: OFF
Will Continue To
Print Until Stopped
Press + or - & ENTER
```

**Step 3** Press ENTER to accept this setting.



*The Every Car Report is a real time, continuous report that will continue to print until it is turned off! To stop the printing, press Schedule Auto Reports, press +/- until the Every Car Report display appears, and press +/- to turn the report OFF. Then, press ENTER.*

**NOTE:** This report is usually used for trouble shooting problems.

## Schedule Hour Report

**Step 1** Press +/- until HOUR REPORT appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
    HOUR REPORT
Press + or - & ENTER
```

**Step 2** Press ENTER. The Hour Report display will appear.

```
Hour Report: OFF
Ranges (From-To)
    07A-09A & 11A-02P
Press + or - & ENTER
```

**Step 3** Use the +/- keys to set the report ON (print at the end of each hour within the selected range) or OFF. The default is OFF. Two ranges of hours can be programmed.

**Step 4** Press ENTER to accept the setting.

## Schedule Daypart Report

You can select one or two ranges of Dayparts to include in the automatic report. The default is OFF.

**Step 1** Press +/- until DAYPART appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
    DAYPART
Press + or - & ENTER
```

**Step 2** Press ENTER. The Daypart Report display appears.

```
Daypart Report: OFF
Dayparts:
    01-12 & 00-00
Press # Keys & ENTER
```

**Step 3** Press +/- to set the report On or Off.

ON	The report will print at the end of each Daypart within the selected ranges.
OFF	The Daypart report will not automatically print.

**Step 4** Press ENTER or ° to move to the next field.  
Use the number keys to enter the Dayparts to include in the report.  
Two Daypart ranges can be entered for each report.

**Step 5** Press ENTER to accept these settings.

## Schedule Shift Report

You can schedule the Shift report to print for any or all of the store's shifts.

**Step 1** Press +/- until SHIFT REPORT appears on the Schedule Auto Report display.

Schedule Auto Report Select report, SHIFT REPORT Press + or - & ENTER
--

**Step 2** Press ENTER. The Shift report display will appear.

Shift Report: OFF Include Shifts: 1, 2, 3  Press + or - & ENTER
--

**Step 3** Press +/- to set the report On or Off. The default is OFF.

**Step 4** Press ENTER or °, and then use the number keys to enter the shifts to be included in the automatic report.

ON	Report will print at end of each shift within the selected range.
OFF	Report will not automatically print.

**Step 5** Press ENTER to accept these settings.

## Schedule Day Report

You can schedule the Day report to print for any or all days of the week.

**Step 1** Press +/- until DAY REPORT appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
  DAY REPORT
Press + or - & ENTER
```

**Step 2** Press ENTER. The Day Report display will appear.

```
Day Report: ON
Range: MON SUN
Print: 11:30 P
Press + or - & ENTER
```

**Step 3** Press the +/- keys to set the report ON or OFF. The default is OFF.

**Step 4** Press ENTER or °, and then press +/- to select the first day for the report to print.

**Step 5** Press ENTER or °, and then press the +/- keys to select the final day for the report to print.

**Step 6** Press ENTER or °, and then press the number keys to enter a time of day for the report to print.

**Step 7** Press ENTER to accept these settings.

## Schedule Week Report

**Step 1** Press +/- until WEEK REPORT appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
    WEEK REPORT
Press + or - & ENTER
```

**Step 2** Press ENTER. The Week report display will appear.

```
Week Report: OFF
Print: 11:30 P

Press + or - & ENTER
```

**Step 3** Press the +/- keys to set the report On or Off. The default is OFF.

**Step 4** Press ENTER or °, and then press the number keys to set a time of day at the end of the week for the report to print.

**NOTE:** Day of the week is set up in the Set Up Accounting display (page 51).

**Step 5** Press ENTER to accept these settings.

## Schedule Month Report

**Step 1** Press +/- until MONTH REPORT appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
    MONTH REPORT
Press + or - & ENTER
```

**Step 2** Press ENTER. The Month Report display will appear.

```
Month Report: OFF
Print: 11:30 P

Press + or - & ENTER
```

**Step 3** Press the +/- keys to set the report On or Off. The default is OFF.

**Step 4** Press ENTER or °, and then press +/- to select a time of day at the end of the month for the report to print.

**Step 5** Press ENTER to accept these settings.

## Schedule Year-to-Date Report

**Step 1** Press +/- until YEAR-TO-DATE appears on the Schedule Auto Report display.

```
Schedule Auto Report
Select report,
  YEAR-TO-DATE
Press + or - & ENTER
```

**Step 2** Press ENTER. The Year-To-Date Report display will appear.

```
Year-to-Date: OFF
Will print at end of
month & year.
Press + or - & ENTER
```

**Step 3** Press the +/- keys to set the report On or Off. The default is OFF.

**Step 4** Press ENTER to accept this setting.

The Year-To-Date report will print at the store closing time.

## 2. Set Up Dayparts and Shifts

Dayparts allow the store manager to look at the different types of activity that your store probably has: busy in the early morning, slower in late morning, busy during the lunch period, slow in the afternoon, and busy again around dinner time. Since each of these periods can be several hours long, and they will overlap the clock hours (10, 11, 12, etc.), the day can be broken into pieces called Dayparts. The System 30 allows you to set up 12 Dayparts.

Since most stores have several shifts, the System 30 allows you to track activity for each shift. The System 30 allows you to have 1, 2, or 3 shifts.

Follow the instructions below to set up your Dayparts and Shifts.

### Set Up Dayparts

**Step 1** Press **EXIT** until the Standby display (or one of the other mini report screens) appears.

12: 34: 12P	• • • ---
Service Time =	01: 32
Cars in Lane =	6
Total Time =	2. 32

**Step 2** Press the **SET UP DAYPARTS & SHIFTS** key. The Set Up Dayparts display will appear.



Set Up Dayparts/ Shifts Menus: DAYPARTS____ Press + or - & ENTER
---

**Step 3** Press +/- to display DAYPARTS.

**Step 4** Press **ENTER** to select Dayparts.

*The first Set Up Dayparts display will appear.  
Use this series of screens to set the Start time for each Daypart.*



*Up to 12 Dayparts can be set. You only need to enter the Start time. Each Daypart will end when the next one begins. The last Daypart End time will be the Store Closing time.*

*Dayparts 2-12 cannot start before the previous Daypart!*



Here is some additional information about Daypart times and display entries:

1. The System 30 has up to 12 possible daypart periods numbered 1 through 12. You may use as many of the dayparts as you want. You do not have to set them all. Enter a 0 for any Daypart that is to be turned off.
2. Daypart times entered will apply to every day of the week.
3. Daypart #1 cannot start before the earliest open time entered in the Store Hours display (see page 57).
4. Gaps in Daypart times **are not permitted**.
5. The last programmed Daypart will end at the closing time entered in the Store Hours schedule (see page 57).

The first display is used to set Dayparts 1-4.

```
Set Up Dayparts(p1)
01=07: 30A  02=09: 00A
03=11: 30A  04=01: 30P
Press # Keys & ENTER
```

**Step 5** Use the number keys to enter the Start times for each Daypart.  
The time can be 12:00 AM through 11:59 PM.

**NOTE:** A Daypart can overlap midnight. Enter the correct time. The system will track the date correctly.

**Step 6** Press **ENTER** or  $\circ$  to move to the next field.  
Press +/- to set the time as AM or PM.

**Step 7** Enter 00:00 and press **ENTER** for any Daypart that will be set to Off.  
The display will show Off when **ENTER** is pressed.

**Step 8** Press **ENTER** or  $\circ$  after each entry to move to the next field or display.  
Fill in the Start time for each of these Dayparts (5-8).

```
Set Up Dayparts(p2)
05=04: 00P  06=07: 30P
07=09: 00P  08=OFF
Press # Keys & ENTER
```

**Step 9** Press **ENTER** or  $\circ$  after each entry to move to the next field or display.  
Fill in the Start time for each of these Dayparts.

**Step 10** Press **ENTER** or  $\circ$  to the next display to set up Dayparts 9-12.

```
Set Up Dayparts(p3)
09=OFF      10=OFF
11=OFF      12=OFF
Press # Key & ENTER
```

**Step 11** Press **EXIT** to accept the entries and return to the  
Set Up Dayparts/Shifts display. Fill in the Start time for this last Daypart.

```
Set Up Dayparts/
Shi fts Menus:
DAYPARTS___
Press + or - & ENTER
```

**Step 12** Press **EXIT** to return to the Standby display.

## Set Up Shifts

**Step 1** Press **EXIT** until the Standby screen is displayed.

```
12: 34: 12P   ••• ---
Service Time = 01: 32
Cars in Lane = 6
Total Time = 2. 32
```

**Step 2** Press the **SET UP DAYPARTS & SHIFTS** key.  
The Set Up Dayparts display will appear.



```
Set Up Dayparts/
Shi fts Menus:
SHIFTS___
Press + or - & ENTER
```

**Step 3** Press **+/-** to display SHIFTS.

**Step 4** Press **ENTER** to select Shifts.  
The Set Up Shifts display will appear.

Set Up Shifts: 1. 07: 30A/ 11: 30A 2, 11: 30A/ 01: 00P 3, 04: 00P/ 11: 00P
---

**Step 5** Use the number keys to enter the Start and Stop times for each shift.  
Press **ENTER** or  $\circ$  to move from one field to the next.

*Up to three shifts can be set up. Enter 00:00 to turn a shift off.  
Shifts can overlap, and there can be a gap between shifts.*

**Step 6** Press **EXIT** until the Standby screen is displayed.  
This ends the set up of Dayparts and Shifts.



*If there is a gap between shifts, no records will be reported on the Shift Report for that period.*

*Shift #1 cannot start before the earliest open time entered in the Store Hours display.*

*Shifts #2 and #3 cannot start before the previous Shift.*

*The last programmed Shift must end at or before the closing time entered in the Store Hours display (see page 57).*

### 3. Set Up Service Goals

**Step 1** Press EXIT until the Standby screen is displayed.

```
12: 34: 12P   . . . ---
Service Time = 01: 32
Cars in Lane =    6
Total Time =    2. 32
```

**Step 2** Press the SET UP SERVICE GOALS key.  
The Set Up Service Goals display will appear.

```
SET UP
SERVICE
GOALS
0
```

```
Set Up Service Goals
Menus:
MASTER SERVICE GOALS
Press + or - & ENTER
```

**Step 3** Press +/- to select MASTER SERVICE GOALS, DAYPART SERVICE GOALS, EVENT TONES, REMOTE DISPLAYS, REMOTE STANDBY MODE, or SET ALARMS.

#### Service Goals Display

Set Up Master Service Goals . . . . . go to page 49  
Set Up Daypart Service Goals . . . . . go to page 51  
Set Remote Displays . . . . . go to page 52  
Remote Display Standby Mode . . . . . go to page 53  
Set Alarm . . . . . go to page 54

## Set Up Master Service Goals

The System 30 allows you to set up Master Service Goals for all Dayparts for all days of the week. You can then set up individual Daypart service goals for any Daypart, for any day of the week (see page 51).

**Step 1** Press +/- to select MASTER SERVICE GOALS.

```
Set Up Service Goals
Menus:
MASTER SERVICE GOALS
Press + or - & ENTER
```

**Step 2** Press ENTER. The Set Master Service Goals display appears.

```
Set Master Service
Goals for:
TOTAL
Press + or - & ENTER
```

**Step 3** Press +/- to select the event to set the goals for. You can set goals for the events programmed in the Assign Locations display, reviewed in Appendix A.

**Step 4** Press ENTER for the event that you want to set goals for. A Master Service Goals display will appear.

```
Master Service Goals
TOTAL          A=1: 30
B=3: 30 C=5: 00 D=7: 00
Press # Keys & ENTER
```

**Step 5** Use the number keys to set the time for each category of work goals. The minimum time for Goal A is 0:01. Most systems will use only categories A and B. Press ENTER or  $\circ$  after each entry to move to the next field.

**Step 6** Press **ENTER** to return to the Set Master Service Goals display.

```
Set Master Service
Goals for:
  TOTAL
Press + or - & ENTER
```

*r* If you want to set goals for another event, press +/- to select another event to set goals for. Then, repeat steps 1 and 2 above.

*r* If you are done, press **EXIT** to return to the Standby display.



*Each Service Goal must be greater than all previous goals. B must be greater than A, C must be greater than B, etc.*

*If programmed, Daypart Service Goals will take priority over the previously programmed Master Service Goals.*

## Set Up Daypart Service Goals

The Master Service Goals display will set the *same* goal for *each* day of the week. You can then use the Daypart Service Goals display to set *individual* goals for any Daypart, for any day of the week.

**Step 1** Press **EXIT** to return to the Set Up Master Service Goals display.

**Step 2** Press **+/-** to select Daypart Service Goals.

```
Set Up Service Goals
Menus:
DAYPART SERVICE GOALS
Press + or - & ENTER
```

**Step 3** Press **ENTER**. The Daypart Service display will appear.

**NOTE:** When this display appears, it will show the settings programmed in the Master Service Goals display.

```
D/P: 1 06:00 A - OFF
Goals for day: ALL
TOTAL: A=1:30
B=3:30 C=5:00 D=7:00
```

**Step 4** Use the number keys to enter a Daypart number for which you want to set a new goal.

**Step 5** Press **ENTER** or **°** to move to the next field.

**Step 6** Press **+/-** to select the event name to set the Daypart for, or select Total to set the goal for the Total time.

**Step 7** Press **ENTER** or **°** to move through the time goal fields.

**Step 8** Use the number keys to enter the time goal for each goal (A, B, C, or D).  
The minimum time for Goal A is 0:01.  
Enter 0:00 to set the Repeat interval off.

**r** If you want to set another Daypart, repeat steps 1 and 2 above.

```
Set Up Service Goals
Menus:
DAYPART SERVICE GOALS
Press + or - & ENTER
```

## Set Remote Displays

The attached remote displays will be on until an event time reaches its designated goal. The remotes can be set to flash once every two seconds when service time reaches a goal.

**Step 1** Press **EXIT** to return to the Set Up Service Goals Menus display.

**Step 2** Press +/- to select **REMOTE DISPLAYS**.

```
Set Up Service Goals  
Menus:  
REMOTE DISPLAYS  
Press + or - & ENTER
```

**Step 3** Press **ENTER**. The Set Remote Displays menu will appear.

```
TOTAL Flash at: A  
Tone at: A Beeps=1  
Rpt=0 Arrival: OFF  
Press + or - & ENTER
```

**Step 4** Press +/- to select the Event to set for.  
Press **ENTER** or ° to move to the next field.

**Step 5** Press +/- to select remote display beginning goal for flash (A,B,C,D or OFF).  
Press **ENTER** or ° to move to the next field.

**Step 6** Press +/- to select remote display beginning goal for tone (A,B,C,D or OFF).  
Press **ENTER** or ° to move to the next field.

**Step 7** Set the tone beeps (1-4).

**Step 8** Set the repeat interval for tone after last goal (0-59).

**Step 9** Press +/- to turn ON or OFF after arrival tone.



*The display will begin a slow flash when the event time exceeds the designated goal.*

*When the vehicle departs the detection point, it will fast flash for 10 seconds for the Daypart selected in the next step.*



## Remote Display Standby Mode

You can determine which event time should be shown on the remote displays when no other events or over-target times are being displayed.

**Step 1** Press **EXIT** to return to the Set Up Service Goals Menus display.

**Step 2** Press **+/-** to select **REMOTE STANDBY DISP.**

```
Set Up Service Goals  
Menus:  
REMOTE STANDBY DISP  
Press + or - & ENTER
```

**Step 3** Press **ENTER**. The Remote Standby Mode display will appear.

```
Remote Standby Mode:  
Display Average Time  
for: DAYPART  
Press + or - & ENTER
```

**Step 4** Press **+/-** to select Daypart, Day or None. Daypart is the default.



*When there is no drive-thru activity for 10 seconds, the remote display will show the average time for the selected display.*

## Set Alarm

The alarm is either a strobe or buzzer that is connected to the System 30 control unit.

**Step 1** Press **EXIT** to return to the Set Up Service Goals Menus display.

**Step 2** Press +/- to select ALARMS.

```
Set Up Service Goals
Menus:
SET ALARMS
Press + or - & ENTER
```

**Step 3** Press **ENTER**. The Alarms display will appear.

```
Set Alarm To: ON__
for: MENU Goal: B__
Duration: 1/Rpt: 0
Press + or - & ENTER
```

**Step 4** Press +/- to set the alarm to On, Off or Pulse.  
Press **ENTER** or  $\circ$  to move to the next field.

*r* If the alarm is set to ON or PULSE, press the +/- keys to select the location name and the Service Goal (A, B, C or D) for the alarm.

*r* If the alarm is set to Pulse, set the Duration field to the number of seconds (0 through 9) that the Alarm should sound or flash.

**Step 5** Set the Repeat Interval (0-59).

**Step 6** Press **ENTER** to accept the settings.

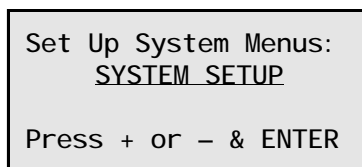
## 4. Set Up the System

These Setup options allow you to set the current date and time, enter your store hours, set up accounting periods, and change the Report and Manager access codes.

### Setup

Set the Date and Time .....	go to page 56
Store Hours .....	go to page 57
Set Up Accounting .....	go to page 58
Change the Reports Access Code .....	go to page 59
Change the Manager Access Code .....	go to page 60
Print Programming .....	go to page 61

**Step 1** Press the SET UP SYSTEM key.  
The System Setup Menu display will appear.

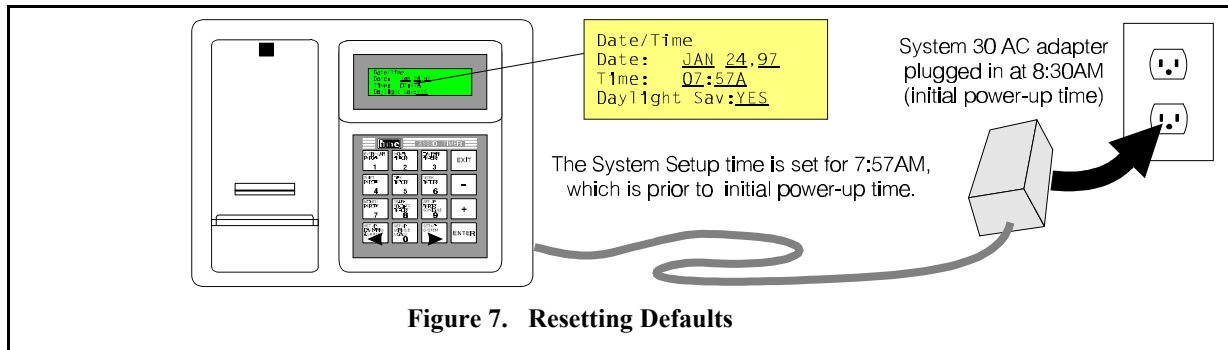


**Step 2** Press + or - until the display shows SYSTEM SETUP.

**Step 3** Press **ENTER** to accept this option, which allows setup of the following functions:

Option	Function
Set Date/Time	Set the current date and time, and Daylight Savings Time adjustment.
Store Hours	Set the open hours of the store.
Set Up Accounting	Set the system for accounting week, fiscal year, and Store ID.
Change Access Codes	Change the Manager's and Report access codes.

## Set the Date and Time



**IMPORTANT:** If the System Setup time is set to a time prior to the first time the System 30 control unit was plugged in, as shown in Figure 7, data will not be gathered until you reset to factory defaults as instructed under “Resetting Defaults” in Appendix A, page 85.

**Step 1** Press the + or – keys to move through the Setup Menu options until DATE & TIME appears.

```
System Setup:  
SET DATE & TIME  
  
Press + or - & ENTER
```

**Step 2** Press ENTER. The Date/Time display will appear.

```
Date/Time  
Date: JAN 24, 97  
Time: 07:57A  
Daylight Sav: YES
```

**Step 3** Press + or – until the correct month is displayed. Press ENTER or ° to move to the Date field.

**Step 4** Press the number keys to enter the correct day of the month and the correct year. Press ENTER.

**Step 5** Press the number keys to enter the correct time. Press ENTER.

**Step 6** Press the + and – keys to select A (AM) or P (PM). Press ENTER.

**Step 7** Press the + and – keys to select automatic adjust for daylight saving time (YES) or no automatic adjustment (NO).

**Step 8** Press ENTER. The system will accept the changes and return to the System Setup display.

**Step 9** Press ENTER again. The system will return to the System Setup Menus display.

```
Set Up System Menus:  
DRIVE-THRU MANAGER  
  
Press + or - & ENTER
```

## Store Hours

**Step 1** Press +/- until System Setup appears on the display.

```
Set Up System Menus:  
SYSTEM SETUP_____  
  
Press + or - & ENTER
```

**Step 2** Press ENTER. The System Setup display will appear.

**Step 3** Press +/- until STORE HOURS appears on the selection line.

```
System Setup:  
STORE HOURS_____  
  
Press + or - & ENTER
```

**Step 4** Press ENTER to display the Store Hours display.

**Step 5** Press +/- to select one day of the week, or all weekdays.

**Step 6** Use the number keys to enter the store hours for the select days.

**Step 7** Press +/- to set the time as AM or PM.

```
Store Hours:  
For Day: ALL  
06:00A-11:30P  
Press + or - & ENTER
```

# Set Up Accounting

**Step 1** Press +/- until SET UP ACCOUNTING appears in the System Setup display.

```
System Setup:
SET UP ACCOUNTING

Press + or - & ENTER
```

**Step 2** Press ENTER. The Set Up Accounting display appears.

```
Set Up Accounting:
Begin: Week MON
Fiscal Yr JAN, 01
StoreID#: 12345678
```

Option	Definition
Begin Week	Enter the day of the week to begin accounting.
Fiscal Year	Enter the date of the customer's fiscal year.
Store ID	Enter the ID number of this location, up to 8 digits.

**Step 3** Press +/- to enter the day of the week to begin accounting.

**Step 4** Press ENTER or ° and then press +/- to enter the fiscal year start month.

**Step 5** Press ENTER or ° and then use the number keys to enter the fiscal year start date and Store ID.

**Step 6** Press ENTER to accept these entries and return to the System Setup display.

## Changing the Reports Access Code

The Report Access code is used to prevent unauthorized access to the System data. The Report code allows reports to be printed on demand, but will not provide access to system setups.

The Store Manager can change the access code for the Reports.

**Step 1** Press +/- to display CHANGE ACCESS CODES.

```
System Setup:
CHANGE ACCESS CODES

Press + or - & ENTER
```

**Step 2** Press ENTER. Press +/- to select REPORTS code. Press ENTER.

```
To Select Access
Code To Be Changed:
REPORTS

Press + or - & ENTER
```

**Step 3** Use the number keys to enter the new code.  
The new code must be entered twice before it will be accepted.

```
Change REPORTS Code
Enter New code: ____
Retype New code: ____
Press # keys & ENTER
```



*You will have three chances to enter the correct code. After a third failed attempt, the system will switch to the Standby screen. The keypad will not lock up.*

```
12: 34: 12P   . . . ---
Service Time = 01: 32
Cars in Lane=    6
Total Time =    2. 32
```

## Changing the Manager Access Code

The Manager's Access code is used to prevent unauthorized access to the System data. The Manager's code allows reports to be printed on demand, and also provides access to system setups.

**Step 1** Press +/- to display CHANGE ACCESS CODES.

```
System Setup:
CHANGE ACCESS CODES

Press + or - & ENTER
```

**Step 2** Press ENTER.

**Step 3** Press +/- to select MANAGER. Press ENTER.

```
To Select Access
Code To Be Changed:
MANAGER

Press + or - & ENTER
```

**Step 4** Use the number keys to enter the new code.  
The new code must be entered twice before it will be accepted.

```
Change MANAGER Code:
Enter New code: ____
Retype New code: ____
Press # keys & ENTER
```

**NOTE:** You will have three chances to enter the correct code. After a third failed attempt, the system will go back to the Standby screen. The keypad will not lock up.

```
12: 34: 12P   . . . ---
Service Time = 01: 32
Cars in Lane=    6
Total Time =    2. 32
```



## Print Programming

It is a good idea to print all of the program entries that you have made. Then, if there is a system problem, you will be able to quickly reenter the settings.

**Step 1** Press +/- until PRINT PROGRAMMING appears in the display.

```
Setup System Menus:  
PRINT PROGRAMMING  
  
Press + or - & ENTER
```

**Step 2** Press ENTER. The Print Programming options will display.

```
Print Programmi ng:  
Print: SYSTEM  
Setup Listing.  
Press + or - & ENTER
```

*You can print Setup listings for INSTALLER, SYSTEM, DAYPART & SHIFTS, SERVICE GOALS, REPORT SCHEDULE or ALL.*

**Step 3** Press +/- to select the listings to print.

**Step 4** When START is flashing, press ENTER to print the selected setup listing.

**Step 5** Press EXIT to abort the Printing and return to the Setup System Menus display.

```
Setup System Menus  
PRINT PROGRAMMING  
  
Press + or - & ENTER
```

## IV. IN CASE OF TROUBLE

### A. Special Problems

If any problem with the System 30 cannot be corrected using the following troubleshooting instructions, call HME at 1-800-848-4468 for help.

#### Problem 1 — Incorrect display data

When the system is first plugged in, the following data should appear on the LCD display on the control unit:

STORE IS CLOSED!  (Press + or - to view other screens)	<i>or</i>	12: 34: 12P --N N N N Service Time = 0: 00 Cars in Lane = 0 Total Time = 0: 00
---	-----------	---

0:00 should appear on any remote display unit. If 0:00 does not appear, press the Reset switch and check for loose wiring connections. See Figure 4 on page 5 for location of the Reset switch inside the printer cover of the control unit.

**NOTE:** If the store is closed, only one flashing decimal point will appear on any remote unit.

#### Problem 2 — Processor hangup

If the time (updated every second) on the displays does not change, and flashing decimals appear on the remote displays, press the reset switch.

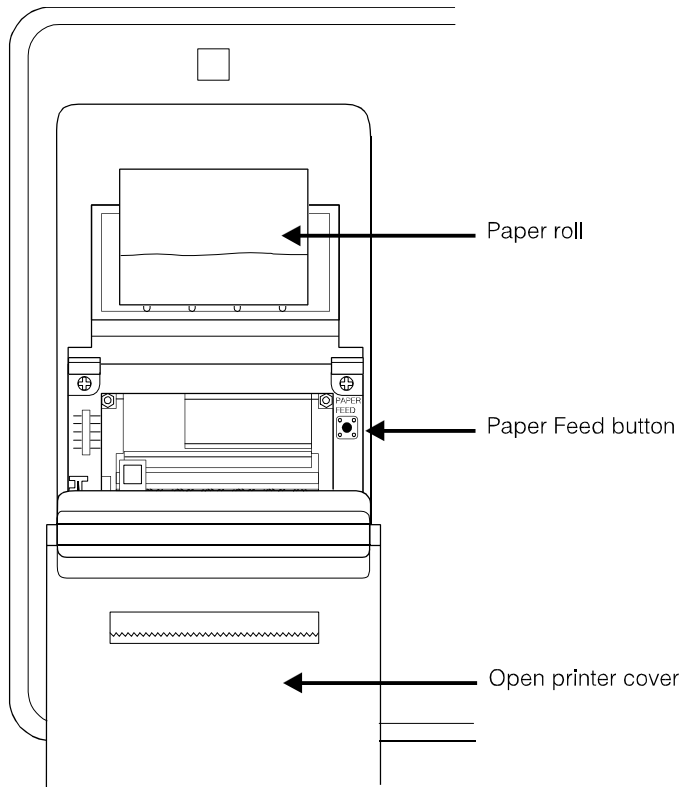
#### Problem 3 — Cars not being detected

If cars are driving into the drive-thru lane, and a • appears on the System 30 displays, press the reset switch. If no • appears, check the operation of the vehicle detector.

Problem 4 — Printer malfunction

If the printer malfunctions, check for loose wiring connections. Press the PAPER FEED button to cycle the paper (see Figure 8).

**CAUTION:** *Unplug the AC adapter or disconnect J2 before removing the ribbon cable from the printer circuit board.*



**Figure 8. System 30 PAPER FEED button**

## Problem 5 — Low Battery

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HM Electronics INC.  
CURRENT DATE/TIME:  
LOW BATTERY

If the system loses its memory, the LCD will display LOW BATTERY. The Real-Time Clock Module on the main circuit board should be replaced. If this happens, change the Real-Time Clock as follows.

### Real-Time Clock Module Replacement

**WARNING:** You must unplug the System 30 AC adapter from the electrical outlet before replacing the Real-Time Clock Module.

**CAUTION:** Handle the Real-Time Clock Module with care. Do not get grease or body oil on its contacts.

! Open the front cover of the control unit.

! Locate the Real-Time Clock Module in the center of the control unit circuit board.

! Very carefully, pull the defective Real-Time Clock Module off the board.

! Carefully insert the new Real-Time Clock Module into the chip socket. Make sure that the notch is on the left, and the dot is at the lower left as you place the chip in the board socket.

! Close the control unit.

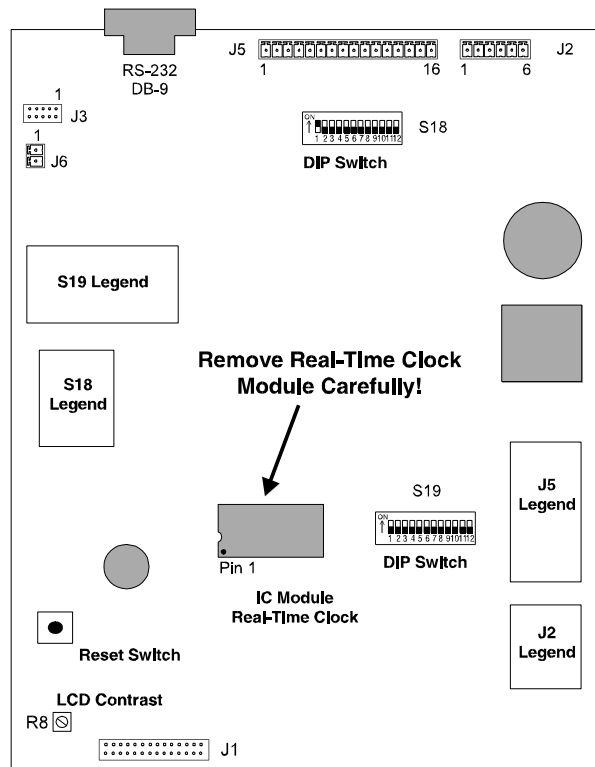


Figure 9. System 30 Real-Time Clock Module on Control Unit circuit board

## B. Restarting the System after the Real-Time Clock Module has been Replaced

If the Real-Time Clock Module has been replaced, the LOW BATTERY display will disappear from the LCD after the power has been restored.

**NOTE:** If the system has been without power for more than 2 days with a LOW BATTERY display, all system settings will be lost. Always keep a full printout of all system settings.

Follow the instructions on page 56 to set the date and time. Then, print out a full set of system settings to see if the system has lost its memory. If the data is lost, the System Setups will need to be re-input.

## C. Diagnostic Tests

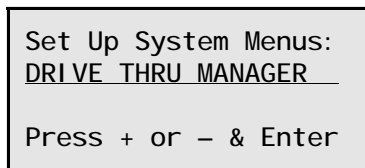
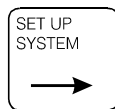
The System 30 has a user diagnostics feature which you can perform by following the instructions in this section.



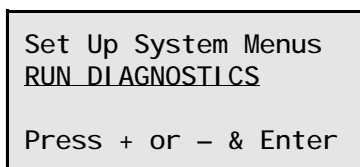
*Before doing any diagnostic tests, check the system status reports to verify the system's status.*

To run diagnostics:

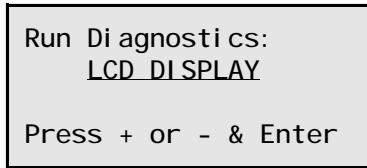
**Step 1** Press the SET UP SYSTEM key.  
The timer will show the Set Up System Menus display.



**Step 2** Press +/- until RUN DIAGNOSTICS appears in the display.



**Step 3** Press **ENTER**. The Run Diagnostics display will appear.



**Step 4** Press +/- to select a diagnostic test to run. Test options include KEYPAD, LCD DISPLAY, PRINTER, and REMOTE.

**Step 5** Press **ENTER** to start the selected test.  
A copy of the test results will automatically be printed.  
The testing process can be stopped by pressing **ENTER** or **EXIT** at any time.

## D. Clearing Printer-Paper Jams

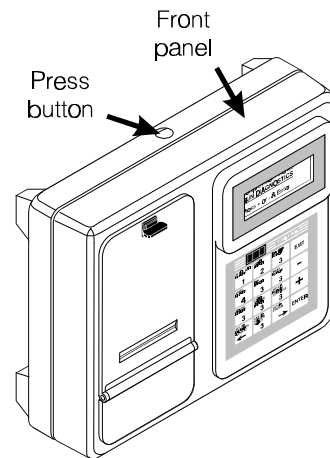
If the paper in your System 30 printer jams, follow these instructions carefully.



### **CAUTION!**

*Never pull the paper backward through the printer, toward the paper roll, to remove it from the printer.*

**Step 1** Open the front panel of the System 30 control unit by pressing down on the small button on top of the cabinet and slowly pulling the front panel forward.

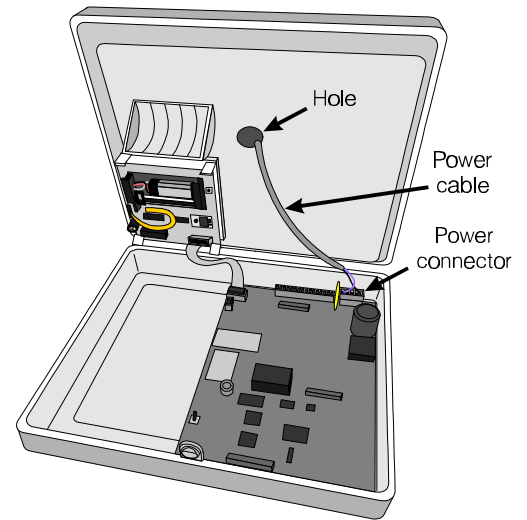


**Figure 10.** Press down on button and pull front panel forward.

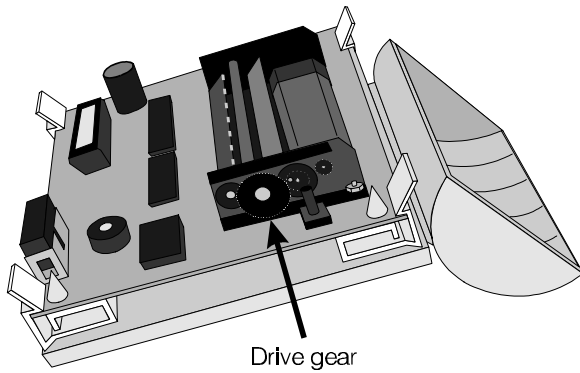
**Step 2** Remove power from the printer by gripping the cable connector and pulling it out of its receptacle on the main circuit board.

***Pull the connector, not the cable.***

Push the cable and connector back through the hole in the cabinet.



**Figure 11.**  
**Remove power from printer**



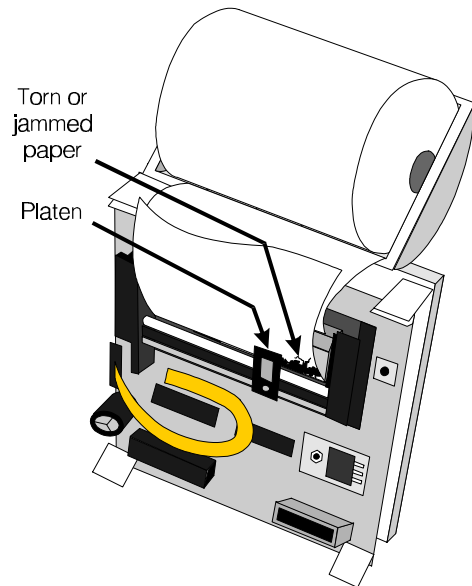
**Figure 12.** Turn drive gear to move platen

**Step 3** Locate the drive gear, the largest black, plastic gear on the right side of the printer. Turn the gear slowly counterclockwise to move the printer head (platen) to the left, or clockwise to move it to the right, away from the jammed paper.

**NOTE:** Most paper jams occur when the platen pushes the torn paper to the right side of the roller.

**Step 4** Pull the paper forward slowly to clear the jammed paper from the roller area. Tweezers may be needed. Tear or cut off any damaged paper.

**Step 5** Plug the power cable connector back into the receptacle on the main circuit board, and carefully close the front panel of the control unit.



**Figure 13.** Move platen away from jammed paper



## V. OPTIONAL EQUIPMENT

The following equipment is available for use with the System 30.  
To order any of these items, call the HME Sales Department at (858) 535-6060.

<b>Equipment</b>	<b>Model Number</b>
Standard Remote Display Unit with 1 inch (25.4mm) display and 50 ft. (15 m.) Cable	R30
System 30 Single-Side Remote Display with 2 inch (50.8mm) display and 50 ft. (15 m.) Cable	R30S
System 30 Dual-Side Remote Display with 2 inch (50.8mm) display and 50 ft. (15 m.) Cable	R30D
System 30 Single-Side Super-Bright Remote Display with 2 inch (50.8mm) display and 50 ft. (15 m.) Cable	R30SB
System 30 Dual-Side Super-Bright Remote Display with 2 inch (50.8mm) display and 50 ft. (15 m.) Cable	R30DB
Remote Thermal Printer with Cable	*
Thermal Printer Paper	*
Ultrasonic Vehicle Detector	DU2 or DU3
Vehicle Detector Board	VDB101B
External vehicle Loop Detector	VDX201
Computer Serial-Port Interface Cable (This cable can also be ordered from a computer dealer.)	See Appendix D
Stop Timer Switch	SB1
Strobe Light	SL1
Audio Alert	*
Modem	MK1
Memory Expansion (4MB)	XM30
PC Software	PC30
Control Switch	*
Phone Line Switch	LS1
100 ft. (30 m.) Extension Cable	*
Printer Replacement Kit	*

\* Some products have no model numbers. They can be ordered by description only.



## VI. SPECIFICATIONS

### Control Unit

Voltage input	12VAC
Supply current (max)	Main unit only 0.4A Main + 1 remote 0.7A Main + 2 remotes 1.0A Main + 3 remotes 1.3A Main + 4 remotes 1.6A
Indicators	4-line alpha-numeric LCD data display
Connectors	6-pin header for AC power and remote display 16-pin header for detection point, greet, and control 9-pin female D-sub connector for PC interface 2-pin header for alert output
PC interface	RS232, baud rate 9600, full-duplex
Operating temperature	32E to 104EF (0E to 40EC)
Dimensions	9"H x 11" W x 4"D (406 x 305 x 89 mm)
Weight	3 lbs, 5 oz. (1.5 kg) maximum

### Standard Remote Display, 1" LED (R30)

Dimensions	6.6"H x 4.3"W x 1.8"D (167.64 x 109.22 x 47.52 mm)
Weight	.5 lbs (.34 Kg)

### Optional Internal Printer

Line width	24 characters per line
Printer paper	Thermal calculator paper

### Optional Remote Display Unit, 2" LED

Dimensions	4¾"H x 8¾"W x 2¼"D (120.65 x 222.25 x 57.15 mm)
Weight	2 lbs 8 oz (1.13 kg)

# APPENDIX A

## Installer Setup Changes

The Installer Setup displays are used to change the printing options, number of lanes, detector assignments, and other basic system settings.

**Step 1** Press +/- to select INSTALLER SETUP.

```
Setup System Menus:
  INSTALLER SETUP
Press + or - & Enter
```

**Step 2** Press ENTER. The Installer Password display will appear.

```
Enter Installer
Password for access
to INSTALLER SETUP.
Code: _ _ _ _ _
```

**Step 3** Enter your Installer Password using the number keys and press ENTER. A warning display will appear.

```
CHANGES TO INSTALLER
SETUP WILL DELETE
HISTORICAL RECORDS!
PRESS EXIT or ENTER.
```

**Step 4** Press ENTER to continue. The Installer Setup display will appear.

```
Installer Setup:
***** CAUTION *****
DELETE UNDER 4 SECS
Press + or - & Enter
```

**Step 5** Press +/- to choose a setup option: DELETE UNDER 4 SECS, SET PRINTER OPTION, SET UP LANE, SET CONTROL, ASSIGN LOCATIONS, SET NUMBER OF LANES, and DEFAULT PROGRAM.

### Setup Option

Delete Cars Under 4 Seconds	go to page 71
Set Printer Option	go to page 72
Set Up Lane	go to page 73
Set Control	go to page 75
Assign Locations	go to page 77

## Delete Vehicles Under 4 Seconds

This function is used to discard vehicles that drive through without stopping, and therefore do not record at least 4 seconds at the detection point that marks the beginning or end of the vehicle's total time.

The installer can set the system to discard vehicles that do not remain at the detection point at the *start* of the total time, at the *end* of the total time, or both. The system defaults are YES at the start and NO at the end.

- Step 1** Press +/- until DELETE UNDER 4 SECS appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
DELETE UNDER 4 SECS
Press + or - & Enter
```

- Step 2** Press ENTER. The Discard <4 Seconds display will appear.

- Step 3** Press +/- to set each field On (YES) or Off (NO).  
Press ENTER to move to the next field.

```
Discard <4 Sec Vehs:
At start of Total YES
At end of Total: NO
Press + or - & Enter
```

- Step 4** Press EXIT to accept the setting and return to the Installer Setup display.

## Set Printer Option

**Step 1** Press +/- to display SET PRINTER OPTION on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
SET PRINTER OPTION
Press + or - & Enter
```

**Step 2** Press ENTER to view the Printer Option display.

```
Printer Option:
Printer: INTERNAL

Press + or - & Enter
```

**Step 3** Press +/- to set one of the following options:

Option	Function
Internal	Use the System 30 internal printer.
External	Use an external printer.
None	Do not print.

*For most systems, choose Internal.*

**Step 4** Press ENTER to accept this setting and return to the Installer Setup display.

## Set Up Lane

Each store has a limit on how many cars can fit in the service lane, based on the length of the lane and the size of a typical car. This function allows you to discard vehicles when there are unusual delays in service or when the maximum number of cars allowed in the lane is exceeded.

- Step 1** Press +/- until SET UP LANE appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
SET UP LANE
Press + or - & Enter
```

- Step 2** Press ENTER. The Set Up Lane display will appear.

```
Set Up Lane:
Max Serv Idle : 01:00
& Delay Time: 02:00
Max Cars in Q : 15
```

Options for the Set Up Lane display include:

<b>Option</b>	<b>Function</b>
Maximum Service Idle	This is the maximum time that the last detection point "ON" or "CON" can be vacant with cars between locations. The possible range is 00:01 (one second) through 10:00 (10 minutes). The default is 01:00 (one minute).
Maximum Delay Time	This is the maximum time to allow for a vehicle to leave the first Detection Point "ON" or "CON", and arrival at the last Detection Point "ON" or "CON" before discarding the record. The possible range is 00:01 through 10:00 (minutes:seconds). The default is 02:00.
Maximum Number of Cars in the Lane	If the queue has more cars than the programmed maximum, the record for the first car will be discarded. Options are 1 through 24. The default is 15. The distance between the first detection point (menu board or order point) to the service window or pickup window is 10 feet per car.
Option off	Setting the Service and Delay times to 00:00 or 00 turns this function OFF. Cars will not be deleted even if they exceed the typical number of cars that can fit in the lane.

## Set Control

The System 30 allows you to set up events that will be outside of the automatic control of the system. This function is typically used for two-lane or six-lane installations, where one or more lanes are only open for heavy use periods. For example, a two lane location may only require the second or passenger-side lane to be open during the heavy traffic lunch hours.

**Step 1** Press +/- until SET CONTROL appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
SET CONTROL
Press + or - & Enter
```

**Step 2** Press ENTER. The Set Control display will appear.

```
Set "CONTROL" to OFF
Schedule MON-SUN
From 00:00A To00:00P
Press + or - & Enter
```

**Step 3** Press +/- and the number keys to set the status for this location.

**Step 4** Press ENTER or °, and then use the +/- keys to set the days of the week for this detection point to be controlled.

**Step 5** Press ENTER or °, and then use the number keys to set the times for this location to be controlled.

Option	Definition
AUTO	AUTO permits the timed scheduling of opening and closing times for the events that are assigned CON in the Assign Locations display.
MANUAL	MANUAL permits the store to control opening and closing of the events through the activation of a remote switch.
OFF	No independent control is set.



*Only events that have been assigned CON in the Assign Locations display (see page 77) will appear on the Set Control display.*

*Controlled events will open at the Controlled schedule or store opening, whichever is later.*

*Controlled events will close at the Controlled schedule time or store close, whichever is earlier.*

**Step 6** Press EXIT to accept changes and return to the Set Up System Menus display.



## Assign Locations

When the system is set up, you must assign a function (On, Off, Independent, Greet, etc.) to each detection point. You must also assign a name to each point (Menu, Service, Cashier, etc.). Follow the instructions below to complete these setup activities using the ASSIGN LOCATIONS displays.

- Step 1** Press +/- until ASSIGN LOCATIONS appears on the selection line of the Installer Setup display.

```

Installer Setup:
***** CAUTION *****
ASSIGN LOCATIONS
Press + or - & Enter
    
```

- Step 2** Press ENTER to accept this selection.

*The first display in the Assign Locations sequence allows you to enter the function, name, and delay time for detection points 1 and 2.*

**NOTE:** The system will display the proper menus for the number of lanes entered in the Number of Lanes display.

```

Assign Locations(p1)
V1= ALT /P-WARN DLQ
V2= ON /MENU DLQ
Press + or - & Enter
    
```

The system allows the following settings for each detection point:

Setting	Definition
ON	Always active during open hours.
OFF	Not used.
CON	Controlled by a remote switch or by the event control schedule. Typically used for peak hour lanes in multi-lane locations.
ALT	ALERT tone only, does not count for reports.
IND	INDEPENDENT is assigned when times will be recorded and reported but not calculated into the total time. IND will always be assigned to the Wait Area and can be assigned to a Pre-alert, Alert or Pre-Warning detection point.
GRT	When GREET is assigned, the audio is connected to the detection point instead of a vehicle detector. Note: If GRT is selected the appropriate switch on S19 of the circuit board must be selected.

**Step 3** Press +/- to select a setting for each detection point in the system.  
Press **ENTER** to move to the NAME field.

**Step 4** Press +/- to select a Name to assign to each detection point in the system.  
*Event name options are listed on the next two pages.*

**Step 5** Press **ENTER** to accept the Name entry and move to the Delay Time field.

**Step 6** Use the number keys to set a Delay Time (0-9 seconds) for each detection point.

The detection delay allows you to eliminate delays that employees are not responsible for, such as a delay at the menu board to permit the customer to roll down the window or a delay at the cashier's station to permit the customer to get their money out.

### **Event Names: One- Lane Location**

The system allows you to assign any of a set of pre-programmed names to each detection point in the system. The table below lists the available names for a one-lane system.

<b>Location Name</b>	<b>System 30 Name</b>
ARRIVAL	ARRIVAL
ALERT	ALERT
BOOTH	BOOTH
CASHIER	CASHER
DELIVERY	DELIVRY
GREET	GREET
MENU BOARD	MENU
ORDER POINT	ORDERPT
ORDER POINT 1	ORDER 1
ORDER POINT 2	ORDER 2
PRE-ALERT	PRE-ALT
PRE-LOOP	PRE-LP
PRESENTER	PRESNTR
PRE-WARNING	P WARN
SERVICE	SERVICE
WAIT AREA	WAIT AR
WINDOW 1	WINDOW1
WINDOW 2	WINDOW2
PICKUP WINDOW	PICKUP

*The same name cannot be assigned to more than one location!*

## Assigning Names in a One-Lane Location:

The following sample screens show how a one-lane system with six detection points could be set up.

- Step 1** Press +/- until ASSIGN LOCATIONS appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
ASSIGN LOCATIONS
Press + or - & Enter
```

- Step 2** Press ENTER to accept this selection.

- Step 3** Press +/- to select a setting for each detection point.  
Press ENTER or ° to move to the Name field.

- Step 4** Press +/- to choose a name for each detection point.  
Press ENTER or ° to move to the Delay Time field.

- Step 5** Use the number keys to enter a Delay Time for each detection point.

```
Assign Locations(p1)
V1= ALT /P-WARN DLQ
V2= ON /MENU DLQ
Press + or - & Enter
```

- Step 6** Press ENTER or ° to move to the next display.

```
Assign Locations(p2)
V3= GRT /GREET DLQ
V4= ON /CASHER DLQ
Press + or - & Enter
```

**Step 7** Press **ENTER** or  $\circ$  to move to the next display.

```
Assign Locations(p3)
V5= ON /SERVICE DLQ
V6= IND /WALT AR DLQ
Press + or - & Enter
```

**NOTE:** GREET cannot come before MENU.

**Step 8** Press **EXIT** when all detection points in the system have been set.

*There will be a brief delay while the system is being configured.  
The system will then return to the Installer Setup display.*

```
Installer Setup:
***** CAUTION *****
ASSIGN LOCATIONS
Press + or - & Enter
```

**r** If you are done, press **EXIT** to return to the Standby display.

## Event Names: Two-Lane Location

The system allows you to assign any of a set of pre-programmed names to each detection point in the system. The table below lists the available names for a two-lane system.

<b>Location Name</b>	<b>System 30 Abbreviation</b>
ARRIVAL 1	ARVL 1
ARRIVAL 2	ARVL 2
ALERT 1	ALT 1
ALERT 2	ALT 2
PRE-ALERT 1	P-ALT 1
PRE-ALERT 2	P-ALT 2
PRE-LOOP 1	P-LP 1
PRE-LOOP 2	P-LP 2
PRE-WARNING 1	PW 1
PRE-WARNING 2	PW2
BOOTH 1	BOOTH 1
BOOTH 2	BOOTH 2
CASHIER 1	CASHR 1
CASHIER 2	CASHR 2
DELIVERY 1	DLVRY 1
DELIVERY 2	DLVRY 2
GREET 1	GREET 1
GREET 2	GREET 2
MENU BOARD 1	MENU 1
MENU BOARD 2	MENU 2
ORDER POINT 1	ORDER 1
ORDER POINT 2	ORDER 2
PRESENTER1	PRSNT 1
PRESENTER2	PRSNT 2
SERVICE 1	SERV 1
SERVICE 2	SERV 2

## Assigning Names in a Two-Lane Location:

The following sample screens show how a two-lane system with six detection points could be set up.

- Step 1** Press +/- until ASSIGN LOCATIONS appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
ASSIGN LOCATIONS
Press + or - & Enter
```

- Step 2** Press ENTER to accept this selection.

```
Assign Locations(p1)
V1= ON /MENU 1 DLQ
V2= ON /MENU 2 DLQ
Press + or - & Enter
```

- Step 3** Press ENTER or ° to move to the next display.

```
Assign Locations(p2)
V3= ON /CASHR 1 DLQ
V4= ON /CASHR 2 DLQ
Press + or - & Enter
```

- Step 4** Press ENTER or ° to move to the next display.

```
Assign Locations(p3)
V5= OFF /_____ DLQ
V6= OFF /_____ DLQ
Press + or - & Enter
```

- Step 5** Press EXIT when all detection points in the system have been set.

*There will be a brief delay while the system is being configured.  
The system will then return to the Installer Setup display.*

```
Installer Setup:
***** CAUTION *****
ASSIGN LOCATIONS
Press + or - & Enter
```

- ┌ If you are done, press EXIT to return to the Standby display.

## Event Names: Six-Lane Location

The system allows you to assign any of a set of pre-programmed names to each detection point in the system. The table below lists the available names for a six-lane system.

LANE 1  
LANE 2  
LANE 3  
LANE 4  
LANE 5  
LANE 6  
BOOTH 1  
BOOTH 2  
BOOTH 3  
BOOTH 4  
BOOTH 5  
BOOTH 6  
TELLER 1  
TELLER 2  
TELLER 3  
TELLER 4  
TELLER 5  
TELLER 6

### Assigning Names in a Six-Lane Location:

The following sample screens show how a six-lane system with six detection points could be set up.

**Step 1** Press +/- until ASSIGN LOCATIONS appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
ASSIGN LOCATIONS
Press + or - & Enter
```

**Step 2** Press ENTER to accept this selection.

```
Assign Locations(p1)
V1= ON /LANE 1 DLO
V2= ON /LANE 2 DLO
Press + or - & Enter
```

**Step 3** Press ENTER or  $\circ$  to move to the next display.

```
Assign Locations(p2)
V3= ON /LANE 3 DLO
V4= ON /LANE 4 DLO
Press + or - & Enter
```

**Step 4** Press **ENTER** or  $\circ$  to move to the next display.

```
Assign Locations(p3)
V5= ON /LANE 5 DLO
V6= ON /LANE 6 DLO
Press + or - & Enter
```

**Step 5** Press **EXIT** when all detection points in the system have been set.  
The system will then return to the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
  ASSIGN LOCATIONS
Press + or - & Enter
```

**Step 6** If you are done, press **EXIT** to return to the Standby display.



## Set Number of Lanes

This function allows the user to tell the system the number of lanes in the store location.

- Step 1** Press +/- until NUMBER OF LANES appears on the selection line of the Installer Setup display.

```
Installer Setup:
***** CAUTION *****
SET NUMBER OF LANES
Press + or - & Enter
```

- Step 2** Press **ENTER** to accept this selection.  
The system will ask you to select the number of lanes for this location.

```
Set Number of
Lanes: 1
(1, 2, or 6)
Press # and EXIT
```

- Step 3** Press the number keys to enter the number of lanes.

- Step 4** Press **EXIT** to accept the setting and return to the Installer Setup display.



*In a six-lane store location, individual lanes can be turned off.*

## Resetting Defaults

The system can be reset to the factory defaults.

**NOTE:** Resetting the system will erase all user-programmed settings and car data.

**Step 1** From the Standby display, press the Set Up System key.

```
12: 34: 12P --N N N N
Service Time = 01: 32
Cars in Lane = 6
Total Time = 2. 32
```

**Step 2** Press +/- until INSTALLER SETUP is displayed.

```
Set Up System Menus:
INSTALLER SETUP
Press + or - & Enter
```

**Step 3** Press ENTER. The Installer Warning display will appear.

```
CHANGES TO INSTALLER
SETUP WILL DELETE
HISTORICAL RECORDS!
PRESS EXIT OR ENTER.
```

**Step 4** Press **ENTER**. The Installer Setup display appears.  
Press +/- until **DEFAULT PROGRAM** is displayed.

```
Installer Setup:
***** CAUTION *****
DEFAULT PROGRAM
Press + or - & Enter
```

**Step 5** Press **ENTER**. The Reset System display appears.

**Step 6** Press +/- to choose Yes or No. No is the default.

```
Reset system to
DEFAULT SETTINGS?
YES
Press + or - & Enter
```

*A warning message will be displayed if you request a system reset.*

```
DEFAULTING SYSTEM
WILL ERASE CUSTOMER
SETTINGS AND DATA!
press EXIT or ENTER
```

**Step 7** Press **ENTER** to reset the system, or  
press **EXIT** to cancel the system reset.

**Step 8** Press **EXIT** until the system returns to the Standby display.

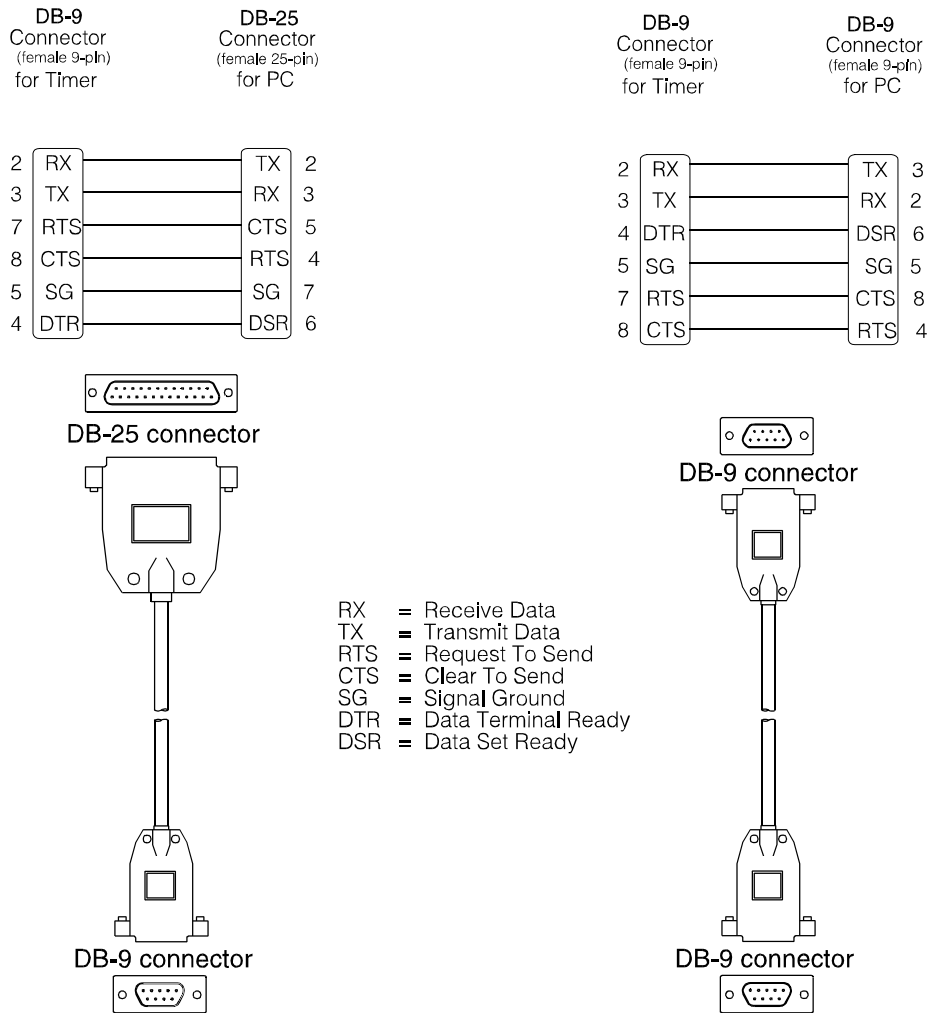
```
12: 34: 12P --N N N N
Service Time = 0:00
Cars in Lane= 0
Total Time= 0.00
```

## APPENDIX B PC Interface Setup

You must have an HME PC30 to use the System 30 with a Personal Computer (PC).

To interface the System 30 with a personal computer serial port, you must have an RS232 interface (Null Modem) cable. If you do not, it can be purchased at most computer stores or from HME. The cable must be connected to the 9-pin connector on top of the System 30 control unit, and to the RS232 serial port on the PC. Pin connections for the cable wires must be as shown in Figure 14, below.

If you have any questions please contact HME at 1-800-848-4468.



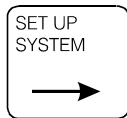
**Figure 14. RS232 connectors**

# APPENDIX C

## Quick Reference Guide for System 30 Firmware Version 1.01

### FIRST-TIME SETUP

STORE IS CLOSED!  
(Press + or – keys to view  
other screens)



Set Up System Menus:  
DRIVE-THRU MANAGER  
Press + or – & ENTER

Set Up System Menus:  
SYSTEM SETUP  
Press + or – & ENTER

System Setup:  
SET DATE/TIME  
Press + or – & ENTER

Date/Time  
Date: JAN 24, 97  
Time: 07:57A  
Daylight Sav: YES

Set Up System Menus:  
SYSTEM SETUP  
Press + or – & ENTER

Set Up System Menus:  
INSTALLER SETUP  
Press + or – & ENTER

Enter Installer  
Password for access  
to INSTALLER SETUP.  
-----

INCORRECT PASSWORD  
TRY AGAIN  
ENTER PASSWORD

Maximum Access Code  
Trys Exceeded!  
Key Pad Locked for 5  
Minutes!

Set Up System Menus:  
INSTALLER SETUP  
Press + or – & ENTER

CHANGES TO INSTALLER  
SETUP WILL DELETE  
HISTORICAL RECORDS!  
PRESS EXIT OR ENTER

### IN-OPERATION SETUP

Set Up System Menus:  
INSTALLER SETUP  
Press + or – & ENTER

Enter Installer  
Password for access  
to INSTALLER SET UP  
Code: \_ \_ \_ \_ \_

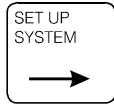
INCORRECT PASSWORD  
TRY AGAIN  
ENTER PASSWORD

Maximum Access Code  
Trys Exceeded!  
Key Pad Locked for 5  
Minutes!

Set Up System Menus:  
INSTALLER SETUP  
Press + or – & ENTER

CHANGES TO INSTALLER  
SETUP WILL DELETE  
HISTORICAL RECORDS!  
PRESS EXIT OR ENTER

## SET UP SYSTEM



Set Up System Menus:  
DRIVE-THRU MANAGER  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:  
DRIVE-THRU MANAGER  
PRINT PROGRAMMING  
RUN DIAGNOSTICS  
SYSTEM SETUP  
INSTALLER SETUP

### Drive-Thru Manager

Drive-Thru Manager.  
RESET DETECTOR  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:  
RESET VEHICLE DETECTOR  
DELETE FIRST CAR IN LANE

Press ENTER to  
RESET VEHICLE  
DETECTOR(s)

DELETE FIRST CAR IN  
LANE: 1  
Press # Keys & ENTER

## Print Programming

Print Programming Menus:  
Print: SYSTEM  
Setup Listing  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:  
Installer  
System  
Dayparts & Shifts  
Service Goals  
Report Schedule  
ALL

### Run Diagnostics

Run Diagnostics:  
LCD DISPLAY  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:  
Keypad  
LCD Display  
Printer  
Remote

## SYSTEM SETUP

System Setup:  
STORE HOURS  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:

Date & Time  
Store Hours  
Accounting  
Access Codes

### Date & Time

System Setup:  
SET DATE & TIME  
Press + or - & ENTER

Dates/Time  
Date: JAN 24, 96  
Time: 07:57A  
Daylight Sav: YES

### Store Hours

System Setup:  
STORE HOURS  
Press + or - & ENTER

Store Hours:  
For day= ALL  
06:00 A - 11:30 P  
Press + or - & ENTER

### Set Up Accounting

Set Up System Menus  
SET UP ACCOUNTING  
Press + or - & ENTER

Set Up Accounting:  
Begin: Week MON  
Fiscal Yr JAN\_01  
StoreID#: 12345678

## Access Codes

Set Up System Menus  
CHANGE ACCESS CODES  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:

Report Access Code  
Manager Access Code

### Change Report Access Code

To Select Access Code  
To Be Changed:  
REPORT  
Press + or - & ENTER

Change REPORT Code:  
Enter New code:       
Retype New code:       
Press # keys & ENTER

### Change Manager Access Code

To Select Access Code  
To Be Changed:  
MANAGER  
Press + or - & ENTER

Change MANAGER Code:  
Enter New code:       
Retype New code:       
Press # keys & ENTER

## INSTALLER SETUP

Set Up System Menus  
INSTALLER SETUP  
Press + or - & ENTER

Enter Installer  
Password for access  
to INSTALLER SETUP  
Code: \_\_\_\_\_

CHANGES TO INSTALLER  
SETUP WILL DELETE  
HISTORICAL RECORDS  
Press EXIT or ENTER

INSTALLER SETUP  
\*\*\*\*\* CAUTION \*\*\*\*\*  
DELETE UNDER 4 SECS  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:

SET PRINTER OPTION  
DELETE UNDER 4 SECS  
SET UP LANE  
SET CONTROL  
NUMBER OF LANES  
ASSIGN LOCATIONS  
DEFAULT PROGRAM

### Set Printer Option

Press +/- to view options and  
press ENTER to select:

Internal  
External  
None

Set Printer Option:  
Printer: INTERNAL  
Press + or - & ENTER

### Delete under 4 Secs

Discard <4 Sec Vehs:  
At start of Total: YES  
At end of Total: NO  
Press + or - & ENTER

## Set up Lane

Set Up Lane:  
Max Serv Idle 01:00  
& Delay Time 02:00  
Max Cars in Lane 15

## Set Number of Lanes

Set Number of  
Lanes: 1  
(1, 2, or 6)  
Press # Keys & ENTER

## Assign Locations

Set each location to ON, OFF, CON,  
ALT, IND, or GRT.  
Set name per pages 77-84

Assign Locations (p1)  
V1= ALT /P-WARN DLQ  
V2= ON /MENU DLQ  
Press + or - & ENTER

Assign Locations (p2)  
V3= GRT /GREET DLQ  
V4= ON /CASHER DLQ  
Press + or - & ENTER

Assign Locations (p3)  
V5= ON /SERVICE DLQ  
V6= IND /WAIT AR DLQ  
Press + or - & ENTER

## Set Control

Set CONTROL to OFF  
Schedule MON-SUN  
From 00:00A To 00:00P  
Press + or - & ENTER



## Resetting the Defaults

Reset system to  
DEFAULT SETTINGS

NO

Press + or - & ENTER

DEFAULTING SYSTEM  
WILL ERASE CUSTOMER  
SETTINGS & DATA!

Press EXIT or ENTER

## Dayparts & Shifts



Press +/- to view options and  
press ENTER to select:

Dayparts  
Shifts

## Dayparts

Set Up Dayparts/  
Shifts Menus:

DAYPARTS

Press + or - & ENTER

Set Up Dayparts (p1)

01=07:30A 02=09:00A

03=11:30A 04=01:30P

Press # Keys & ENTER

Set Up Dayparts (p2)

05=04:00P 06=07:30P

07=09:00P 08=OFF

Press # Keys & ENTER

Set Up Dayparts (p3)

09=OFF 10=OFF

11=OFF 12=OFF

Press # Keys & ENTER

## Shifts

Set Up Dayparts/  
Shifts Menus:

SHIFTS

Press + or - & ENTER

Set Up Shifts:

1, 07:30A / 11:30A

2, 11:30A / 01:00P

3, 04:00P / 11:00P

## SET UP GOALS



Set Up Service Goals

Menus:

MASTER SERVICE GOALS

Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:

MASTER SERVICE GOALS

DAYPART SERVICE GOALS

SET UP EVENT TONES

REMOTE DISPLAYS

REMOTE STANDBY DISP

ALARMS

## Master Service Goals

Set Up Service Goals

Menus:

MASTER SERVICE GOALS

Press + or - & ENTER

Set Master Service

Goals for:

MENU

Press + or - & ENTER

Master Service Goals

MENU A=00:30

B=01:00 C=1:00 D=1:00

Press # Keys & ENTER

## Daypart Service Goals

Set Up Service Goals  
Menus:  
DAYPART SERVICE GOALS  
Press + or - & ENTER

Set Daypart Service Goals  
for:  
TOTAL  
Press + or - & ENTER

Daypart 01 SERVICE  
00:00 - 00:00 MON  
Goals                    A=1:00  
B= 0:00 C= 1:00 D=1:00

## Remote Displays

Set Up Service Goals  
Menus:  
SET UP EVENT TONES  
Press + or - & ENTER

Event Tone: MENU  
Begins: OFF    Beeps: 1  
Arrival Tone: OFF  
Press + or - & ENTER

Set Up Service Goals  
Menus:  
DISPLAY FLASH  
Press + or - & ENTER

Set Display:  
Event: TOTAL  
Flash at: C  
Press + or - & ENTER

## Remote Display Standby Mode

Set Up Service Goals  
Menus:  
REMOTE STANDBY DISP  
Press + or - & ENTER

Remote Standby Mode:  
Display Average Time  
for: DAYPART  
Press + or - & ENTER

## Set Alarms

Set Up Service Goals  
Menus:  
SET ALARMS  
Press + or - & ENTER

Set Alarm To: ON  
for: MENU Goal : B  
Duration \_ . \_ Rpt \_ : \_  
Press + or - and ENTER

## REPORTS



Schedule Auto Report  
Select report:  
DAYPART  
Press + or - & ENTER

Press +/- to view options and  
press ENTER to select:

EVERY CAR  
HOUR  
DAYPART  
SHIFT  
DAY  
WEEK  
MONTH  
YEAR-TO-DATE  
DETECTION ACTIVITY  
TRANSFER DATA

## Every Car

Schedule Auto Report  
Select report:  
EVERY CAR REPORT  
Press + or - & ENTER

Every Car Report: OFF  
Will Continue To  
Print until Stopped  
Press + or - & ENTER

## Hour

Schedule Auto Report  
Select report:  
HOUR REPORT  
Press + or - & ENTER

Hour Report: OFF  
Ranges: (From - To)  
07A - 09A & 11A - 02P  
Press + or - & ENTER

## Daypart

Schedule Auto Report  
Select report:  
DAYPART  
Press + or - & ENTER

Daypart Report: OFF  
Dayparts:  
01-12 & 00-00  
Press + or - & ENTER

## Shift

Schedule Auto Report  
Select report:  
SHIFT REPORT  
Press + or - & ENTER

Shift Report: OFF  
Include Shifts: 1, 2, 3  
Press + or - & ENTER

## Day

Schedule Auto Report  
Select report:  
DAY REPORT  
Press + or - & ENTER

Day Report: ON  
Range: MON - SUN  
Print: 12:00 P  
Press + or - & ENTER

## Week

Schedule Auto Report  
Select report:  
WEEK REPORT  
Press + or - & ENTER

Week Report: OFF  
Print: 00:00 A  
Press + or - & ENTER

## Month

Schedule Auto Report  
Select report:  
MONTH REPORT  
Press + or - & ENTER

Month Report: OFF  
Print: 12:00P  
Press + or - & ENTER

## Year-to-date

Schedule Auto Report  
Select report:  
YEAR-TO-DATE  
Press + or - & ENTER

Year-to-Date: OFF  
Will print at end of  
month & year.  
Press + or - & ENTER