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## Welcome

Congratulations on purchasing your new Royal cash register! This register is designed to be easy to use, helping you to focus on running your business.

## Before Starting

Before you start using this manual to set up and customize your cash register, you should know the following.

When you need to press a key, you see a picture of the key you need to press and the name of the key is in another font. For example:


1 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
If you need to type something in the round Number keys area, what you need to type is shown in a special font. For example:

2 Using the round Number keys, press 444444 and then press the Amount Tend Total key.

## What is in the Box?

Look for and unwrap the following:

- Cash Register
- 1 starter roll of standard thermal paper, Royal Reorder Number 013127 ( 57.5 mm ).
- Journal Spindle, installed in the printer compartment
- Barcode reader located in a small box
- RegisterLink ${ }^{\mathrm{TM}}$ software
- 1 set of keys, consisting of:
- 2 Cash Drawer keys (515).
- 2 PRG Program keys (427-023).
- 2 REG Register keys (427-024).
- 2 Z keys (427-012).


## Important Phone Numbers

If you need help or want to order additional supplies, use the following contact information.

| Customer Service: | $1-800-272-6229$ (USA) |
| :--- | :--- |
|  | $1-888-266-9380$ (Canada) |
| Ordering Supplies: | $1-888-261-4555$ |
| Website: | www.royal.com |

To order items, see Ordering Supplies and Accessories on page 153.

## Getting Started

Setting up your cash register consists of the following steps:

- Plugging in and Putting in the Batteries
- Installing the Paper Roll
- Setting the Language
- Setting the Date And Time
- Programming the Sales Tax
- Setting at least 2 Department Keys

Do all the steps to make sure you have your cash register set up correctly.
When you are done with this chapter, see the chapter called Getting To Know the Cash Register, starting on page 12 and the chapter called Setting Up Your Cash Register - the Basics, starting on page 22 for more information about your cash register.

## Plugging in and Putting in the Batteries

Your cash register needs 3 AA 1.5 volt batteries for the memory backup system. These batteries did not come with your cash register and you must purchase them additionally. You should purchase these batteries before you start this section or as soon as possible after setting up the cash register.

Make sure that you plug the cash register into the electrical outlet before you put in the batteries.

## Caution

If you put the batteries in first, they can damage the cash register. Do not use this cash register outdoors in the rain or near any source of liquid.

To get the cash register ready to use
1 Remove the cash register and the parts from the box. Store the box and packing material in a safe, dry place. If you need to move the register in the future, you can put it back in the box.
2 Remove the tape holding the parts of the cash register in place. For example, there may be tape on the Journal Compartment Cover. Make sure you remove the tape on the black Journal Tape spindle inside the printer compartment of the cash register.

3 Put the register on a hard, level surface, away from rain and spilled drinks. A hard level surface makes it easier for the cash drawer to go in and out smoothly.
Do not put the register on a porous surface. Depending on the surface or any cleaning solution used on the surface, the rubber feet may leave marks on the surface. Do not place the register on any valuable surface, such as antique or fine wood tables, desks, and so on.
4 Plug the cash register into a standard three-hole electrical wall outlet. (115-120 volt, 60 hertz). Make sure the electrical cord is not going to get tripped over or accidentally pulled from the electrical outlet.
Put the cash register on an electrical circuit with no other electrical device or appliance. Other appliances can overload the circuit or cause electrical interference with the cash register. It is best that you use a circuit without other appliances already on it.
5 Install the memory backup batteries.

- Open the Journal Compartment cover. Remove the cover and put it aside.
- Move the paper roller bar up and out of the way. Grab the small handle on the right of the print roller bar. Push the little handle towards the back of the cash register and raise the paper roller bar up. You see a slope down to the paper
 compartment. The battery cover is located under the print roller bar, on the slope.
- Remove the battery cover. Press the edge at the top of the cover and push to the back. The cover pops off.
- Put the batteries in the slots. Make sure that the positive and negative ends are in the right place. The batteries have a little plus (positive) and minus (negative) sign on each end to help you.
- Replace the battery cover. Slide the bottom tabs into the long slit in the bottom position and it snap the cover into place. Do not put the tabs in the 2
 holes in the bottom of the compartment. The cover will not close and you will break the tabs.
6 Now you are ready to put the paper in the cash register and set the time and the date. See the next section for more information.


## Installing the Paper Roll

Your cash register has a thermal printer that prints receipts for the customer or a journal tape. Use $2^{1 / 4}$ inch $(57.5 \mathrm{~mm})$ wide standard thermal register paper.

To install the paper roll
1 Insert the PRG key and turn it to either REG1 or REG2.

- If you need a customer receipt, turn the Mode key to the REG1 position.
- If you do not need a customer receipt, turn the mode key to the REG2 position.
2 Unlock and open the Journal Compartment Cover. Grip the left side of the cover and gently pull upward. Remove the Journal Compartment Cover and set aside.

3 Remove the Journal Takeup spindle. Place the paper roll in the little round area at the bottom of the compartment. Make sure the paper feeds out from the bottom of the roll, towards the front of the cash register.


4 Grab the small handle on the right of the print roller. Push the little handle towards the back of the cash register and raise the roller bar up.
5 Lay the end of the paper across the printer as shown. Move the print roller down onto the paper and snap into place. Make sure both sides are snapped down.


- Press the Feed key until the paper catches and moves through the printer.
6 Do one of the following:
- If you do not need to print receipts: Place the black plastic Journal Takeup spindle on its grooves above the Battery compartment. The spindle sits above the paper roll. Press the Feed key to move the paper through the printer about 10-12 inches. Push the paper through one of the narrow openings in the center of the Journal Takeup spindle. Press the Feed key until the paper catches and
 begins to wind securely around the Journal Takeup spindle. Replace the Journal Compartment Cover.
- If you want to print receipts:

Lay the customer receipt paper over the receipt slot and close the Journal Compartment Cover.

## Installing the Barcode Reader

Your cash register comes with a barcode reader. It allows you to scan items with a UPC symbols, instead of using the keyboard to type the PLU number.

The barcode reader plugs into the port on the lower right side of the cash register. You don't need to do anything special to make it work after you plug it into the cash register. Use the directions below to install it.

To install and program the barcode reader
1 Unpack the reader from the box.
2 Turn the Mode key to OFF.

3 Locate the port for the scanner on the lower right side of the cash register. Plug the reader into the port.

4 Now you can program the cash register so
 that you can scan UPC symbols to ring up items. For specifics, see Programming PLUs with the Barcode Reader on page 58.

## PC-Based Software

Your cash register includes:

- RegisterLink PC-based software.
- This software allows you to connect the cash register to your PC to download your sales information and transfer it to QuickBooks ${ }^{\circledR}$ Pro 2002 or later or Peachtree ${ }^{\circledR} 7.0$ or later accounting software. For instructions about using the software, see the RegisterLink manual.
- Back-Up and Restore - Whether you programmed your cash register data on the cash register or on your PC, you can back-up that programming and store the data on your PC. Should you lose the memory in your cash register, you can simply restore the data from your PC back to the cash register without having to reprogram all the PLU's, Departments and other data.
- Additional Registers - When you buy additional cash registers, you can use the back-up-and-restore feature with multiple registers of the same model number. Just program one register, back-up the data to your PC, and then restore or download the data from your PC to the other registers, as long as they are all the same model number. This saves you the time of having to program each register individually.
Check the Royal web site for any new features and upgrades to RegisterLink.

Using the RegisterLink software requires connecting your computer to the cash register using the serial port. To connect your computer to the serial port, you need a null-modem serial cable that may or may not be included. If necessary, you can purchase this cable directly from Royal or at any computer supply store. For technical details about the serial connection, see About the Serial Port on page 97.

The RegisterLink software is on a CD. Please install the software from this CD. Then check for updates on the Royal web site (www.royal.com). If a later version of the RegisterLink software is available on the web site, download it from the web site and install it on your PC. It is important that
the CD version of the software is already installed on your PC before you download and install any upgrades.

RegisterLink software instructions are separate from this manual. The RegisterLink instruction manual is on the CD that contains the software. An updated and revised version of the instruction manual accompanies any newer version of the software that is downloaded from our web site. Please refer to the RegisterLink instruction manual for all software related operational instructions and assistance.

## Setting the Language

Before you program the cash register, you need to specify a language if you do not want to use English. You can select English, Spanish, French, or German.

Changing the language changes the words you and the customer see on the display. For more information about the prompts that appear, see Language Table on page 146 .

## Note

If you start programming the cash register and then set the language, you will lose all your programming changes.

To set the language
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 Using the round Number keys, press 19. Press the round Number key to select the language you want. The options are:

| English | $\mathbf{0}$ |
| :--- | :--- |
| Spanish | 1 |
| French | 2 |
| German | 3 |

3 Press the Void key. The language your cash register shows on the display is set.

4 If you want to the cash register to show a language other than English, see Programming Flag Options on page 65 to specify the language you want. If you set the language after you program more options, all the custom programing you add is erased.
You are ready to start programming the cash register.
Note
Before you continue, see page 65 for other settings you may want to use.

## Setting the Date And Time

The date changes every day and prints in the month-day-year format. You can prevent the date from printing on the transaction receipts. The date format can also be changed to print day-month-year. For more information, see Programming Flag Options on page 65.

You can set the cash register so that it does not print the time on receipts. For more information, see Programming Flag Options on page 65.

The time can print in either the 12 or 24 hour (military time) format. The default setting is to print in the 12 hour format, which is normally used. To change to the 24 hour format, see Programming Flag Options on page 65.

## Reminder

When you set the time, you need to type the time in a 24 hour format. To convert the current time to a 24 hour format, add the number 12 to every hour after 12 noon. For example: 1:15 P.M. programs as 1315. 8:20 A.M. programs as 0820.

To set the date
Example 1: To program June 30, 2004
1 Put the PRG key in the Mode key slot and turn it to the PRG position.

2 In the round Number keys area, press 063002 and then press the \#/ST/NS key.

To set the time
Example 2: To program 9:45 P.M.
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 In the round Number keys area, press 2145 and then press the Qty/Date key.

## Programming the Sales Tax

Now you need to program the sales tax for your area. If you do not know your sales tax rate, contact your local government office.

## Tip

You must press at least 4 digits in step 4.

## Note

If you make a mistake or you hear an error beep, press Clear and start over with Step 3.

Example 3: To program a sales tax rate of 6\%
1 Find your sales tax rate. You may need to contact your local government office.

2 Put the PRG key in the Mode key slot and turn it to the PRG position.
3 In the round Number keys area, press 1 and then press the Tax 1 key.
4 Press 6000 and press the Amount Tend Total key. Your sales tax is programmed.
To program other tax rates, in Step 4, press the following:
Table 1 Additional tax rate programming

| For this tax rate... | Press these keys... |
| :--- | :--- |
| $7.75 \%$ | 7750 |
| $5.5 \%$ | 5500 |
| $10.5 \%$ | 10500 |

For more advanced tax rate programming, see Programming Complex Tax Rates on page 76.

## Programming Department Keys

You are done with the basic programming of your cash register. After you program at least 2 department keys, you are ready to use the cash register, if you do not want to use any of the other features.

For more information about the other features of your cash register, see Setting Up Your Cash Register - the Basics on page 22 and Setting Up Your Cash Register - Advanced on page 40.

To program Department 1 as taxable with no preset price and no description
1 Using the round Number keys, press 00001 and press the Subtotal/w/Tax key.

2 Using the round Number keys, press 0 and press the Dept 1 key.
3 Press the Amount Tend/Total key. The department information is saved in the cash register.

To program Department 2 as non-taxable with no preset price and no description
1 Using the round Number keys, press 00000 and press the Subtotal/w/Tax key.
2 Using the round Number keys, press 0 and press the Dept 2 key.
3 Press the Amount Tend/Total key. The department information is saved in the cash register.
For more information about programming department keys, see Programming Department Keys on page 41.

# Getting To Know the Cash Register 

This chapter shows you the basics of using your cash register after you set it up. If you have not yet set up your cash register, see the Quick Start sheet that came in the box with your cash register or Getting Started on page 3.

## About the Displays

Your cash register has 2 displays.

## Customer Display

You can lift, tilt, and rotate customer display so customers can see what is happening. When you move the register or store it, close the display so it doesn't get damaged.

Your cash register has a 1 line customer display

- 1 line that shows letters and numbers (alphanumeric)

The alphanumeric display shows 10 digits for descriptions, scrolling text messages, and sales dollar amounts.

## Opening and Closing the Customer Display

You can open and close the customer display so that customers can easily see what is happening.

To open and close the customer display
1 To open the rear customer display, pull up, tilt, and rotate to view from any direction.
2 To close, turn the display to face the rear of the machine and press down.

## Operator Display

Your cash register also has a 2 line display for the operator. Both lines shows letters and numbers (alphanumeric). The following codes can appear in the display:

Table 2 Codes and words that can appear in the display

| This code... | Appears when... |
| :---: | :---: |
| : | the $-\% / \mathbf{R A}$ key registers a percent discount amount. Also appears in the Customer Display. |
| $=$ | the Charge, Check, Amount Tend Total keys are pressed. Also appears in the Customer Display. |
| ADD ON | the +\%/PO key registers a plus percentage amount. * |
| CASH | the Amount Tend Total key finalizes a cash sale. * |
| CHANGE or C | change is due. * |
| CHARGE | the Charge key finalizes a sale. * |
| CHECK | the Check key finalizes a sale. * |
| CLERK ERR or CLERK E12 | clerk numbers have been programmed and the clerk system is active. When this appears, the clerk number must be entered. |
| COUPON | the -/CPN key is pressed. * |
| DISCOUNT | the -\%/RA key registers a percent discount amount. * |
| E.J FULL | the Electronic Journal memory is full. Run the electronic journal report to clear the memory. See EJ -FULL Error on page 100. |
| ERROR | an incorrect key is pressed. Press the Clear key to clear. |
| NO SALE | the \#/ST/NS key is pressed. * |
| NON TAX | the Non Tax key is pressed. |
| P | you are in the middle of a programming step. Also appears in the Customer Display. |
| PE | if an error is detected in the printer. |
| PAPER END | there may be a printer error. |
| P-O | the +\%/PO key is used for a paid out function. * |
| R-A | the -\%/RA key is used for a received on account function. * |
| REFUND | the Return key is pressed. * |
| SEC CODE | a manager password is programmed. When this appears, you must enter the password. |
| SUBTTL | the Subtotal w/Tax or \#ST/NS key is pressed. * |
| TAX 1/TAX 2 | the TAX 1 or TAX 2 key is pressed. |
| VOID/CORR | the Void key is operated. * |
| * also prints on the receipt or journal tape. |  |

When ringing up sales, the department number or PLU number can also appear. If a description or name has been programmed, this description also appears.

## About the Numeric Display

The following codes can appear in the Numeric Display:
Table 3 Codes that can appear in the Numeric Display

| This code... | Appears when... |
| :--- | :--- |
| PE | an error is detected in the printer. |
| P | you are in the middle of a programming step. Also <br> appears in the Customer Display. |
| Cr | the Charge key is pressed. Also appears in the <br> Customer Display. |
| CH | the Check key is pressed. Also appears in the Customer <br> Display. |
| CA | the Amt Tend/Total key is pressed. Also appears in the <br> Customer Display. |

## Using the Mode Key Area



The Mode key area allows you to do the following.
Table 4 Mode key settings
This setting... Does this...

- PRG Programs the cash register and sets the cash register to Training mode. Use the key marked PRG.
- OFF Turns the cash register off. It also electronically locks the cash drawer. All keys do this.
- REG1 Turns the cash register ON for all normal sales transactions. All features of the cash register are activated as programmed. A customer receipt is printed for every transaction.

Table 4 Mode key settings
This setting... Does this...

- REG2 Turns ON the cash register and allows all normal sales transactions just like REG1 mode. However, the built-in printer is turned-off so that customer receipts are not automatically printed. This option allows you to control the amount of receipt paper used by not printing a receipt for every transaction and only printing a receipt for those transactions where one is required.
- X Lets you read all transaction totals without clearing any totals. This is useful for mid day reports. Use the key marked Z.
- Z Lets you read all transaction totals and clears all transaction totals to zero, except the end of day, or close of day, totals. Use the key marked Z.

If you need to keep the register plugged in when you are not using it, turn the Mode key to the OFF position. The keyboard will not work and the cash drawer is electronically locked. A small amount of power maintains the program and transaction data totals.

- For more information about programming the cash register, see Setting Up Your Cash Register - the Basics on page 22 and Setting Up Your Cash Register - Advanced on page 40.
- For more information about using the cash register to ring up sales, see Ringing up Sales and Using Training Mode on page 71.
- For more information about running reports, see Running Reports on page 80 .


## Using the Keyboard

The keyboard on your cash register looks like the following:


To use the keyboard, do the following:


- To use the cash register, put the key marked REG in the Mode key hole and turn to Reg1 or Reg 2 . Now you can press the round Number keys and Department keys to ring up a sale. For more information about ringing up sales, see Ringing up Sales and Using Training Mode on page 71.
- To program the cash register, put the key marked PRG in the Mode key slot and turn to PRG. For more information about programming
 the cash register, see Setting Up Your Cash Register - the Basics on page 22 and Setting Up Your Cash Register Advanced on page 40.


## Using the Cash Drawer

The cash drawer is where you put the money after you ring up a sale. The cash drawer has slots for putting paper bills and a tray for coins. You can store paper items such as checks and charge slips under the removable coin tray.

When you ring up a sale, the cash drawer automatically opens so you can make change and put money away. You can also open the cash drawer without making a sale. This is handy if you need to make change for someone or forgot to put something away.

The cash drawer locks in 2 different ways. Locking the cash drawer is a good idea if you need to leave the cash register.


- The cash drawer automatically locks electronically when you move the register key to the Off position. Remember to take the register key out if you are leaving the register. The emergency open lever will still open the cash drawer when it is electronically locked.
- You can also use the 515 key to mechanically lock the cash drawer. If you lock the cash drawer this way, you must have the key to open it again. Even the emergency open lever will not open the cash drawer. when it is locked with the key.


## Important

If the cash drawer will not open, see if the lock on the cash drawer is turned to the right. If it is, the drawer is locked with the 515 key. You need the key to unlock the cash drawer. If the key is lost or locked in the cash drawer, contact Royal.

To open the cash drawer after a sale

1 When you are done ringing up a sale, press the Amount Tend Total key at the bottom right of the keyboard. The cash drawer opens. You can make change and put the money in the drawer.

2 When you are done, push the cash drawer closed.
To open the cash drawer without making a sale
1 Press the \#/ST/NS key at the bottom right of the keyboard. The cash drawer opens and a No Sale receipt prints.
2 When you are done, push the cash drawer closed.
To lock and unlock the cash drawer using the key
1 Using the small key labeled 515, put the key in the lock in the front of the cash drawer.

2 To lock the cash drawer, turn the key to the right and remove the key from the lock.

3 To unlock the cash drawer, turn the key to the left and remove the key from the lock.

To open the cash drawer using the emergency lever
1 With your hands on the cash drawer, carefully tip the front of the register up. Underneath the cash register, toward the back of the register, you see a small lever.


2 Push the lever in the only direction it will move. The cash drawer opens. If the cash drawer will not open, make sure it is not locked with the 515 Drawer key.

## Using the Accessory Drawer

Your cash register has a small drawer above the cash drawer. The Accessory drawer can be opened at any time by anyone. It is a good place to put things like pens, pencils, and note pads.

Because anyone can open the drawer, it is not a good idea to put checks or charge slips in it. You should put those in the cash drawer, under the coin drawer.

Make sure that you never put anything valuable in the Accessory drawer.

## Using the Counterfeit Detector Feature

Protected by U.S. Patent D477,836. Other U.S. and Foreign Patents Pending.

Your cash register comes with a handy Counterfeit detector feature that helps you decide if the money is possibly counterfeit or fraudulent.

All new style American paper money, except for the $\$ 1$ bill, have a strip that glows under ultra-violet (UV) light. The Counterfeit detector feature lets you see that strip before you accept the paper money.

## About Paper Money

Just because the Counterfeit detector feature shows a glowing strip does not always mean the paper money is real. A clever forger may include this strip in a fake bill. Always use multiple methods to decide if you want to accept a bill as valid.

Each bill amount has a strip that glows a different color. The location of the UV markings in US and Canadian currency is shown below:

Table 5 US paper currency UV mark locations

| US $\boldsymbol{\$}$ bill... | Has this color... | Located here... |
| :--- | :--- | :--- |
| $\$ 5$ | Blue | Left edge of bill |
| $\$ 10$ | Orange | Right of Hamilton's head |
| $\$ 20$ | Green | Left edge of bill |
| $\$ 50$ | Yellow | Right of Grant's head |
| $\$ 100$ | Red | Left of Franklin's head |

Canadian Paper Currency: UV sensitive dots are placed in a random pattern throughout the bill. These dots glow blue. Newer Canadian bills may have different UV-sensitive markings. See your bank or local government office for help on what UV-sensitive markings to look for in a genuine bill.

## Detecting Suspicious Money

Always use multiple counterfeit detection methods to guard against fraudulent paper currency. Some of the more common methods for detecting valid US currency are:

- Look for blue and red threads in the fabric.
- Hold the bill up to a light source and check for the watermark - which should be the face of the same President pictured on the front of that denomination bill.
- Hold the bill up to a normal light source (not a UV light) and look for the UV sensitive strip, the characters USA and the numeric denomination of the bill (either in numeric form or spelled out).
- Mark the bill using a Universal Counterfeit Detector Pen, which uses special ink that reacts to counterfeit paper currency.
For other currency, such as Canadian money, see your bank or local government office for help.

To use the counterfeit detector feature
1 Put the paper money in the slot in the front of the cash register.


2 Press the UV light button. The UV light turns on.
3 Look thru the small window on the front of the cash register. If the bill has the strip, you see a strip that glows as a color. See the table above for the correct color. If the bill is Canadian, you see blue dots.
4 When you are done, remove the bill from the slot. Press the UV button again. The UV light turns off.

## Things to Remember

The counterfeit detector feature in the cash register uses ultra-violet light (UV light) technology and only works on new style US paper currency. This currency has the large portrait of a US president, off-center on the front of the bill. Old style U.S. bills, printed before 1996 and all $\$ 1$ bills do not have any fluorescent markings. These bills do not react to UV light and the counterfeit detector in cash register does not show any fluorescent markings on these bills, even though they may be valid US bills and not counterfeit.
Keep in mind that any one method of counterfeit detection, including the UV light mechanism built-in to the cash register, is not fool-proof and only suggests suspicious paper currency.
Using this counterfeit detection feature is open to user interpretation of the reading of the currency under the UV-light. If no fluorescent markings are seen on a US bill, then consider the bill suspicious. This may not mean that the bill is definitely counterfeit. Use other counterfeit detection methods to further examine the suspicious bill. If the US dollar bill fails multiple counterfeit detection methods, then the bill may be counterfeit and you must decide whether to accept the bill or not. You should also contact local law enforcement authorities regarding suspicious or counterfeit bills.
The opposite may also apply, when a US dollar bill may show fluorescent markings under UV-light, but there is still a slight chance that the bill is a very sophisticated counterfeit bill. There are no absolute guarantees to the
authenticity of a US dollar bill without the use of very high-end, sophisticated testing methods and devices.

## Programming the UV Light

You can program the UV light to stay on for a certain number of seconds while you view the currency.

You can use the default which is pre-programed to " 00 " seconds and works according to the previous instructions.

You can also program a number from " 01 " to " 99 " that represents the number of seconds the light stays "on" after you press the UV light button. Then the light automatically turns itself off after the programmed amount of time.

To program the UV light


1 Put the key marked PRG in the Mode key slot and turn to PRG. For more information about programming the cash register, see Setting Up Your Cash Register - the Basics on page 22 and Setting Up Your Cash Register - Advanced on page 40.
2 Using the round number keys, enter the number of seconds (from 01 to 99) you would like the light to stay on.

3 To save your setting, press the \#ST/NS key.
$\# / s t /$
ns
The button now only works to turn the light on. It does not work to turn the light off.

If the button is pressed when the light is off, then the light turns-on for the number of seconds that you have set. If the button is pressed again while the light is on, the light timer resets, and the light stays on for the full number of programmed seconds.

## Setting Up Your Cash Register - the Basics

This chapter includes explanations for setting:

- Messages on the display and on receipts
- Setting clerk numbers
- Setting machine numbers
- Setting clerk and manager passwords
- Clearing error codes


## Using the Displays

Your cash register includes two displays: 1 for the clerk and 1 for the customer. The displays feature large, easy to read fluorescent digits for easy viewing.

## The Clerk Display

When ringing up sales, you see the department number or PLU number on the clerk display. If a description or name is programmed, this description appears.

For information about all the messages that can appear on the display and how to open and close the display, see Opening and Closing the Customer Display on page 12.

## Setting Alphanumeric Descriptions

You can program custom header and footer messages, clerk names, departments, and item descriptions. These text messages and descriptions appear on the receipt and on the display.

When you are programming the alpha descriptions for Departments, PLUs, Clerks, the Header and Footer messages, use the Alpha Keyboard.

## Note

Only capital letters of the alphabet are on the Alpha Keyboard. You can use lower case letters. See Alphanumeric Code Chart on page 24.


The department keys are clearly labeled with all the letters needed to program these descriptions. When you are programming alpha descriptions, use the department keys to spell out the words you want.

To use the letters in the white part of the Department keys, simply press the Department key.

To use the letters in the lower green area of the keys, press the Dept Shift key and then press the key with the letter you want.

You might need certain symbols or lower case characters that are not found on the Alpha Keyboard. For example, if you require a space between words, or if you need the / symbol, or the - symbol, see the Alphanumeric Code Chart shown in the next section.

## Important



If you enter the wrong character, press the Void key to backspace and delete that character. Now you can continue.

Chapter 4: Setting Up Your Cash Register - the Basics

## Alphanumeric Code Chart

Other characters are also available. Use the tables in this section to help you find the ones you need.

Use this table for lower case letters and numbers.
Table 6 Letters and numbers

| Character | Code Number | Character | Code Number |
| :---: | :---: | :---: | :---: |
| Space | 00 | s | 20 |
| Wide Character | 01 | t | 21 |
| a | 02 | u | 22 |
| b | 03 | v | 23 |
| C | 04 | w | 24 |
| d | 05 | x | 25 |
| e | 06 | Y | 26 |
| f | 07 | z | 27 |
| 9 | 08 |  |  |
| h | 09 | Numbers |  |
| i | 10 | 0 | 30 |
| j | 11 | 1 | 31 |
| k | 12 | 2 | 32 |
| 1 | 13 | 3 | 33 |
| m | 14 | 4 | 34 |
| n | 15 | 5 | 35 |
| $\bigcirc$ | 16 | 6 | 36 |
| p | 17 | 7 | 37 |
| q | 18 | 8 | 38 |
| r | 19 | 9 | 39 |

Use this table for punctuation and foreign characters.
Table 7 Special Characters and Punctuation


| (apostrophe) |  |  |
| :---: | :---: | :---: |
| $"$ | 90 |  |
|  | $<$ | 91 |

## Using Single Width Characters

The following describes the maximum number of characters that can be programmed for each item description in single width.

- Department

12 Characters

- FLU

12 Characters

- Clerk Name
- Header and Footer message

24 Characters
5 Lines (24 characters each)


To make a space to separate words, press the round Number 0 key twice or press the round Number 00 key one time.

- For double wide characters, see Using Double Wide Characters.
- For programming department keys, see Programming Department Keys on page 41.
- For programming PLUs, see Programming PLU Descriptions on page 56.
- For programming Clerk names and numbers, see Setting Clerk Numbers and Names on page 32.


## Programming Blank Lines or Restoring Factory Default Messages

You can customize the header and footer message based on Flag settings for flag numbers: $33,37,38$, and 39.

- Flag \# 33 and 37: You can now individually select whether to turn on and print or turn off and skip the header or the footer messages entirely. This can save paper when you are printing. Or you can leave the factory default phrases and settings.
- Flag \# 38: You can print a blank line or to just skip a blank line. For example, you can program 3 of the five footer lines as blank lines and then select not to print the blank lines to save paper. This prints only the 2 programmed lines for your footer message. Or you can select to leave the blank lines in for spacing so in the final result is 2 lines of print and 3 blank lines with no print, but all 5 lines print and are accounted for.
- Flag \#39: You can program a blank line or program the factory default line by entering a 0 (zero) when you are programming an individual header or footer message line.
For more details about using flag settings, see Programming Flag Options on page 65.

For example, for a blank line to print for the 1st line of the header message:

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
check 2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager
Password, go to the next step.
3 To set Flag \#39 to 0, enter 390 and press the Void key.
4 For the first line of the header message, press 31.
5 Press Return.
6 Press 0.
check 7 Press the Check key.

## About Programming Numbers in Header Messages

If you need to print numbers, you must enter the numbers using the Alphanumeric Code Chart. For example, for the telephone number 999-555-1212, the number 9 is programmed using the character code 39 , the number 5 is programmed using the code 35 , and so on.

## Using Double Wide Characters

For extra emphasis, you can program double wide characters for a specific character or a line of characters.

Normal Size


Double Wide


If you use double wide characters, the maximum number of characters you can use is cut in half.

- Department
6 characters
- PLU
6 characters
- Clerk Name
- Header Message
12 characters
- Footer Message
5 lines, 12 characters each
5 lines, 12 characters each

To make a character print extra wide, you must use the double width code 01 before each character as you type in the description.

## Programming a Header Message

You can specify a header message to print on customer receipts. The header message can be a maximum of 5 lines. Each line can have 24 characters in single width or 12 characters in double width.

## YOUR RECEIPT

THANK YOU
is the default printout for the header message.
You can set Flag \#33 to print the Header message or skip the Header message completely (none of the 5 -lines print).

Make a copy of the blank Worksheet below for future changes or revisions to your header message.

## Header Message Worksheet

Use this worksheet to make your header message. Make a copy of the blank worksheet before you start, in case you make a mistake or change your mind.

| Line 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Note

void
If you enter the wrong character, press the Void key to backspace and delete that character and then continue.

Before programming your header message
1 Write out your store name and the header message you want to program.

2 After writing out your message, count the number of characters on each line. The following example shows a message and the letter count, including spaces.

```
INTERNATIONAL COFFEES 21
222 EAST MAIN STREET 20
OPEN 7AM TO 6PM 15
COFFEES OF THE WORLD 20
```

3 Complete the chart, filling in extra unused characters with blank spaces.

| Line 1 |  | I | N | T | E | R | N | A | T | I | O | N | A | L |  | C | O | F | F | E | E |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Line 2 |  |  |  |  |  | 9 | 9 | 9 | - | 5 | 5 | 5 | - | 1 | 2 | 1 | 2 |  |  |  |  |  |  |  |
| Line 3 |  |  | 2 | 2 | 2 |  | E | A | S | T |  | M | A | I | N |  | S | T | R | E | E | T |  |  |
| Line 4 |  |  |  |  | O | P | E | N |  | 7 | A | M |  | T | O |  | 6 | P | M |  |  |  |  |  |
| Line 5 |  |  | C | O | F | F | E | E | S |  | O | F |  | T | H | E |  | W | O | R | L | D |  |  |

In the example, blank spaces are added at the beginning and end of each line so the message is centered.
Remember, you can make the characters double width but you can only use half the total number of characters if you do this. For example, if you want Coffee to be double wide, you need 12 spaces. For more information about double wide characters, see Using Double Wide Characters on page 27.
You can also use characters other than those on the Department keys, such as numbers, punctuation, and international letters. See the Alphanumeric Code Chart on page 24.

This is an example of a programmed header message:

```
INTERNATIONAL COFFEES
                999-555-1212
222 EAST MAIN STREET
    OPEN 7AM TO 6PM
COFFEES OF THE WORLD
```

To make a space to separate words, press the 0 key twice or press the 00 key one time.


## Note

If you enter the wrong character, press the Void key to backspace and delete that character and then continue.

To program your header message
1 Put the PRG key in the Mode key slot and turn it to the PRG position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 For the 1st line, do the following:

- Using the round Number keys area, press 31.
- Press the Return key. The header line 1 appears on the display.
- Enter the 1 st line of the header, up to 24 characters and then press the Check key.
4 If you want a 2 nd line, do the following:
- Using the round Number keys area, press 32.
- Press the Return key. Header line 2 appears on the display.
- Enter the 2nd line of the header, up to 24 characters and then press the Check key.
5 If you want a 3rd line, do the following:
- Using the round Number keys area, press 33.
- Press the Return key. Header line 3 appears on the display.
- Enter the 3rd line of the header, up to 24 characters and then press the Check key.

6 If you want a 4th line, do the following:

- Using the round Number keys area, press 34.
- Press the Return key. Header line 4 appears on the display.
- Enter the 4th line of the header, up to 24 characters and then press the Check key.
7 If you want a 5th line, do the following:
- Using the round Number keys area, press 35.
- Press the Return key. Header line 5 appears on the display.
- Enter the 5th line of the header, up to 24 characters and then press the Check key.
8 When you are done, turn the Mode key to Off.


## Setting the Footer Message

You can also program a message that automatically prints at the bottom of the receipt. For example, you can list your hours of operation, return policy, or a special promotion at the bottom of every receipt. You can set Flag \#37 to print the Footer message or skip the Footer message completely (none of the 5 -lines print)

The Footer message can have up to 5 lines. Each line can have 24 characters in single width or 12 characters in double width. For more information about double-width messages, see Using Double Wide Characters on page 27.
For example, the message at the bottom of the receipt can say: TUESDAY IS 10\% OFF DAY!

STOCK UP AND SAVE
Use the worksheet on page 28 to plan your message before you start.

## Note

If you enter the wrong character, press the Void key to backspace and delete that character and then continue.

To program your footer message
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 For the 1st line, do the following:

- Using the round Number keys area, press 71.
- Press the Return key. The Footer line 1 appears on the display.
- Enter the 1 st line of the footer, up to 24 characters and then press the Check key.
4 If you want a 2 nd line, do the following:
- Using the round Number keys area, press 72.
- Press the Return key. Footer line 2 appears on the display.
- Enter the 2 nd line of the footer, up to 24 characters and then press the Check key.
5 If you want a 3rd line, do the following:
- Using the round Number keys area, press 73.
- Press the Return key. Footer line 3 appears on the display.
- Enter the 3rd line of the footer, up to 24 characters and then press the Check key.
6 If you want a 4th line, do the following:
- Using the round Number keys area, press 74.
- Press the Return key. Footer line 4 appears on the display.
- Enter the 4th line of the footer, up to 24 characters and then press the Check key.
7 If you want a 5th line, do the following:
- Using the round Number keys area, press 75.

- Press the Return key. Footer line 5 appears on the display.
- Enter the 5 th line of the footer, up to 24 characters and then press the Check key.
8 When you are done, turn the Mode key to Off.


## Setting Clerk Numbers and Names

You can program and assign up to 26 Clerk Numbers so you can monitor sales by individual employees. Each clerk number can also be assigned a 24 character name.

The Clerk Numbers are used in the register modes REG1 and REG2 only. To see the sales totals for each clerk, a Clerk Report is available in both the X and Z modes.

You can spell names by using department keys. For more information, see Setting Alphanumeric Descriptions on page 23.

## Note

When entering the clerk passwords, they appear as asterisks **** on the displays for extra security.

After you specify Clerk Number and Names, you must set a flag option so that clerks must enter their clerk number before every transaction. For more information, see Programming Flag Options on page 65. If you do not set the flag option to turn on Clerk Numbers, all transactions listed on reports and receipts will appear under Clerk 1.

After you are done programming clerk numbers, you can check your results. See Printing the Quick Start Program Confirmation Report on page 36.

## Note

If you make a mistake while you are programming the Clerk Numbers, press the Clear key and begin again with Step 3.

To set clerk numbers
Example 4: For Clerk \#1, Security number is 234
1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 444444 and then press the Amount Tend Total key. The letter C appears in the Customer Display and Clerk Pass appears in the clerk display until Step 6 is complete.

4 Using the round Number keys, press 1 for Clerk \#1 and then press 234 for the Security number and press the Clerk key.

5 Repeat Step 4 for adding Clerks 2 through 26.
6 When you are done programming Clerk Numbers, press the Clear key.
7 Before you can use Clerk Numbers, you must activate the Clerk System by selecting Option \#1 on Flag 12. Do the following:
Press 121 and then press the Void key.
To program a clerk name
Example 5: For Clerk \#1, program name as Sally Smith
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 1 for Clerk \#1 and then press the Return key.

4 To program a name, press the Department keys or the Alphanumeric Code Chart, as needed. For an explanation of how to use the
 Department keys to spell words, see Setting Alphanumeric Descriptions on page 23. Remember, the Department Shift key lets you use the letters in the lower green section on the Department keys. To make a space to separate words, press the 0 key twice or press the 00 key one time.
5 Press the Check key when you are done.
To use clerk numbers
Example 6: Clerk \#1 has a passcode of 234
1 Put the PRG key in the Mode key slot and turn it to either the REG1 or REG2 position.


2 Using the round Number keys, press 1, then press the Clerk key. Press 234 and then press the Check key.
3 The first 2 digits of the display show the Clerk Number when entered and the display shows the Clerk Name. The cash register is now ready for operation.

## Using the Clerk System

If you see the message CLERK E12, RE-CLERK\#, or CLERK ERR in the display and you hear the error beep, clerk numbers are programmed and the clerk system is active.

To use the Clerk System
1 Press the Clear key to clear the error condition and then enter a clerk number and press Clerk.
2 If you programmed a clerk security code, enter the clerk number and then press the Clerk key. Using the round Number keys, press the three digit security code and then press the Check key.

## Setting the Machine Number

You can assign your cash register its own number. This is useful if you have several cash registers and want to track which one creates which receipts and transactions.

The machine number prints on all receipts/journal records, and management reports. The machine number can be up to 4 digits long.

After you are done programming the machine number, you can check your results. See Printing the Quick Start Program Confirmation Report on page 36 .

To set the machine number
Example 7: Program the cash register number to 1234
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 1234 and then press the $+\% / \mathbf{P O}$ key.

## Setting X and Manager Passwords

Two Manager Passwords are available for added security:

- one password to go to the PRG and Z modes
- one password to go to the X mode.


## Important

The Manager Password cannot be 0000 (zeros). The cash register will not accept this password.

## Caution

Write your passwords down in a safe place. If you forget the passwords, you must do a Full System Clear procedure. A Full System Clear erases all transaction information and programming. For details on the Full System Clear, see Full System Clear on page 103.

After you program a password, you must use it every time you go to the program mode or before every X or Z readings, depending on which you set the password for.

When you enter a password, it appears as asterisks **** on the displays for extra security.

To set manager passwords
Example 8: To set the X password as 1212
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
amount tend total


2 Using the round Number keys, press 222222, and then press the Amount Tend Total key. The X PASS prompt and the letter P appears until you complete step 3.

3 Using the round Number keys, press 1212 and then press the Non Tax key.

Example 9: If the PRG/Z password is 1313
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 Using the round Number keys, press 111111 and press the Amount Tend Total key. The PASS prompt and the letter P appears until you complete step 3.
3 Using the round Number keys, press 1313 and press the Non Tax key.
To use manager passwords
Example 10: Go to the X mode, using the Manager Password 1212
1 Put the PRG key in the Mode key slot and turn it to the X position.

2 Using the round Number keys, press 1212 and then press the Check key.
3 You are now ready to run an X Report.
Example 11: Go to the PRG or $Z$ modes, using the Manager Password 1313
1 Put the PRG key in the Mode key slot and turn it to the PRG or Z position.

2 Using the round Number keys, press 1313 and then press the Check key.
3 You are now ready to program or take any reports based on your selection in the first step.

## Printing the Quick Start Program Confirmation Report

Now that basic programming is complete, check your results with a Quick Start Program Confirmation Report.

If you made a mistake during programming, repeat only the step you made the mistake in. For example, if only the tax rate is incorrect, just re-program the tax-you do not need to re-set the time, date, and so on.

To print the Quick Start Program Confirmation Report
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
amount tend total tota

feed

2 Using the round Number keys, press 999999 and then press the Amount Tend Total key.
3 After the Program Confirmation Report prints, press the Feed key to advance the complete report out of the cash register.
See the next page for an example of this report.

Your tape looks similar to the example Program Confirmation Report shown below.


The Date, Time, Tax Rate and Department Status shows the information based upon your input.

For more details of the symbols printed in the Program Confirmation Report, see Running Reports on page 80.

## Before Going to Register Mode

Your cash register offers many other features not covered in this chapter. Other options are covered in the chapter called Setting Up Your Cash Register - Advanced, starting on page 40.

We also provide examples to help you learn how to use your cash register. For information about the examples, see Examples on page 104.

## Error Codes

Your cash register makes beeps as well as shows you messages in the display. Some beeps and messages let you know everything is working and others let you know you need to do something.

Table 8 Common errors
This error... Means this...

| Register Beep | The cash register makes a short beep each <br> time a key is pressed. This is normal and not a <br> cause for concern. |
| :--- | :--- |
| Entry Error Beep | When using your cash register, you must <br> perform all operations in the correct order. If <br> you press the wrong key at the wrong time, an <br> alarm beep sounds and you see a message on <br> the display. The keyboard also locks. Press the <br> Clear key to continue. |
|  | When a transaction is started in the REG1 or <br> REG2 position, you must complete the sale <br> before moving the Mode key to another <br> position. When an operation is started but not <br> finished in the REG1 or REG2 positions, <br> turning the Mode key to another position <br> makes an alarm beep and you see an error <br> message on the display. Press the Clear key to <br> continue. |
| Printer Error or Paper | If a PE appears in the display, check if you are <br> out of paper. Check for a paper jam. For more <br> information about other solutions, see PE |
| End | Printer Error or Paper End on page 99. |

## Clearing an Error



The Clear key stops an alarm beep that happened because a key was pressed that was not correct for that operation.
The Clear key does not erase a transaction that was registered by an operating key and printed on the register tape.

To erase an entry after you press a key that printed the entry on the tape, use the Void key to correct the error.

If the cash register makes a loud error beep, press the Clear key to stop it.

If your cash register will not stop making a beeping sound after you press the Clear key, you can do three more things.

## Half System Clear

If you pressed the Clear key and the error beep does not stop, you can do a Half System Clear. For more information about a Half System Clear, see Half System Clear on page 102.

## Partial Reset

A Partial Reset can help if the Half System clear did not help. For more information, see Partial Reset on page 102.

## Full System Clear

If you did a Half System Clear and a Partial Clear and the error beep still does not stop, as a last resort, you can do a Full System Clear. For more information about the Full System Clear, see Full System Clear on page 103.

## Setting Up Your Cash Register Advanced

This chapter shows you more advanced programming for your cash register. This chapter covers:

- Programming Department Keys
- Programming PLU Descriptions
- Setting the Decimal Points
- Setting the Rounding Rates
- Programming Discounts
- Programming Flag Options

When you are done programming your cash register, you can run the Programming Report to see your results. See Running the Program Confirmation Report on page 80.

Note
While you are programming, the letter P often appears in the display.

## Programming Department Keys

Departments are a category of merchandise. For example, Department 1 can be Housewares, Department 2 can be Food, Department 3 can be Womens Clothing, and so on. This helps you track what you are selling.

Each department can be programmed as taxable or non-taxable, so that if an item needs to be taxed, it is added automatically when you ring up an item in a taxable department.

You can have as many as 99 departments on your cash register. If you have many departments, you may want to make a list so other people who use the cash register can properly use the department keys.

Programming departments includes up to 6 steps. Not all steps listed below may apply to your specific needs, but you must specify a value for each, even if you do not plan to use that feature.

1 Setting Standard and Gallonage Mode
2 Programming Multiple and Single Items
3 Programming High Digit Lock-out (HDLO)
4 Programming Tax Status - If you are using the cash register in Canada, refer to Programming Tax in Canada on page 132 during this step.

5 Programming Department Preset Price

## 6 Programming Department Names

For specific information about each of the items above, see the next sections.

After you are done, you can check your results. See Running the Department Sales Report on page 83.

## To program department keys

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Press the following, in this order:

| Press this... | To specify this... | See this page... |
| :--- | :--- | :--- |
| 0 or 1 | Standard or gallonage | 43 |
| 0 or 1 | Multiple or single items | 43 |
| 0 to 6 | HDLO | 44 |


| Press this... To specify this... See this page... <br> 00 to 15 <br> and then subtotal <br> w/tax Tax status |  |  |
| :--- | :--- | :--- | :--- |
| 0 or up to a 7 digit <br> price | Department preset value | 45 |
| A department key | The department key for <br> this department |  |
| Note <br> lf you do not want to program a department name, press <br> the Amount Tend/Total key. <br> Skip the next steps. You are done with this department. | amount tend <br> total |  |
| The alphanumeric <br> keys to spell the <br> department name. | The department name |  |

4 To add another department, do step 3 again.
To program Department 1 as taxable with no preset price and no description
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 00001 and then press the Subtotal/w/Tax key.
4 Using the round Number keys, press 0 and then press the Dept 1 key.
5 Press the Amount Tend/Total key. Skip this step if you are going to enter a description. The department information is saved in the cash register.

To program Department 2 as non-taxable with no preset price and no description
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
subtotal w/tax

3 Using the round Number keys, press 00000 and then press the Subtotal/w/Tax key.

4 Using the round Number keys, press 0 and then press the Dept 2 key.
5 Press the Amount Tend/Total key. Skip this step if you are going to enter a description. The department information is saved in the cash register.

## Setting Standard and Gallonage Mode

A department can be set for either Standard Mode or Gallonage Mode.
Gallonage Mode allows entering a price with 3 decimal places, representing the cost per gallon, pound, kilogram, yard, meter, or other unit of measurement. For example, $\$ 1.499$ per gallon.

Standard Mode enters the price using the normal 2 decimal place setting.
Table 9 Standard/Gallonage Mode
This number... Means this...

| 0 | Standard Mode |
| :--- | :--- |
| 1 | Gallonage Mode |

## Programming Multiple and Single Items

Multiple Item Entry allows you to ring up two or more items into a department. For example, if you want to ring up 5 of the same items, you can tell the cash register to multiply the one price by the number of items.

Single Item Entry allows you to ring up only one item in a department. For example, if you want to ring up 5 of the same items, you must ring each one up individually.

Table 10 Multiple / single item

| This number... | Means this... |
| :--- | :--- |
| 0 | Multiple Item Sale |
| 1 | Single Item Sale |

## Programming High Digit Lock-out (HDLO)

You can specify the most number of digits that can be rung up in an entry. This feature helps to prevent against large over-rings. If too many digits are entered, the error beep sounds and the keypad locks up. For example, to limit ring ups of more than $\$ 99.99$, set the HDLO to 4 .
Table 11 High digit lock out (HDLO) values
This number... From this... to this...

| 0 | $\$ .01$ | $\$$ |
| :--- | ---: | :---: |
| 1 | .01 | $.09,999.99$ (Standard setting) |
| 2 | .01 | .99 |
| 3 | .01 | 9.99 |
| 4 | .01 | 99.99 |
| 5 | .01 | 999.99 |
| 6 | .01 | $9,999.99$ |

## Programming Tax Status

Some items must have tax collected by law. You can program your cash register to automatically assign the right amount of tax, based on the department the item is assigned to.

Note
If you are using the cash register in Canada, your instructions are in Programming Tax in Canada on page 132.

You can link no tax, a single tax rate (Tax 1), or multiple tax rates (Tax 2, 3 or 4) to a department key.

Table 12 Tax status settings

| This tax status <br> number... | Means this... |
| :--- | :--- |
| 00 | Non-Taxable (use this if you do not want to charge tax) |
| 01 | Taxable by TAX 1 Rate |
| 02 | Taxable by TAX 2 Rate |
| 03 | Taxable by TAX 3 Rate |
| 04 | Taxable by TAX 4 Rate |
| 05 | Taxable by TAX 1 and TAX 2 Rates |
| 06 | Taxable by TAX 1 and TAX 3 Rates |
| 07 | Taxable by TAX 1 and TAX 4 Rates |
| 08 | Taxable by TAX 2 and TAX 3 Rates |
| 09 | Taxable by TAX 2 and TAX 4 Rates |
| 10 | Taxable by TAX 1, TAX 2 and TAX 3 Rates |
| 11 | Taxable by TAX 1, TAX 2 and TAX 4 Rates |
| 12 | Taxable by TAX 1, TAX 3 and TAX 4 Rates |
| 13 | Taxable by TAX 2, TAX 3 and TAX 4 Rates |
| 14 | Taxable by TAX 1, TAX 2, TAX 3 and TAX 4 Rates |
| 15 |  |

## Programming Department Preset Price

If you do not want to preset a price, a price of 0 must be assigned to that department key. Department Preset Price programs a price in a department to save time when ringing up an entry. Even if a price has been pre-programmed, you can override the price at the time of sale.

The price automatically rings up each time the department key is pressed.

## Important

If you do not need a preset price, enter 0 as the price.
If you are using the cash register in Canada, refer to Programming Tax in Canada on page 132 during this step.

## Assigning Department Number Keys

You must assign a department number. After you assign a department number, you can press the Amount Tend/Total key to finish programming if you do not want a department description.

The Department number keys from 1 to 20 are easy to use: You just press the Department number key you want. For example, to use Dept 2, press the Dept 2 key.
dept
shift The Department keys from 21 to 40 are also easy to use. Just press the Dept Shift key and then press the Department number key you want. For example, to use Dept 23, press the Dept 23 key.

To use the Department keys from 41 to 99, do the following:
dept
shift - Press the Dept Shift key.

- Using the round Number keys, type the Department number from 41 to 99 that you want to use. For example, for Department 63, press the 6 key and then press the 3 key.
- Press the Dept Shift key again.


## Programming Department Names

A name or description can be assigned to each department key. This name appears on the clerk display and prints when ringing up sales.

For example, Clothing can print on the receipt in place of Dept 1, Shoes can print on the receipt in place of Dept 2, Sportswear can print on the receipt in place of Department 3, and so on.

When you are programming the descriptions for Departments, use the Alphanumeric Keyboard.

When you are done programming the department description, press the Check key to save your programming. The information is saved in the cash register and you can program the next item.

## Note

Only capital letters of the alphabet are on the Alphanumeric Keyboard. You can also use lower case letters and numbers, certain symbols, and international characters. See Alphanumeric Code Chart on page 47.

The department keys are clearly labeled with all the letters you need to program these descriptions. When you are programming alphanumeric descriptions, use the department keys to spell out the words you want.

You can use the letters in the lower green area of the keys by pressing the Dept Shift key and
 then pressing the key with the letter you want.

You might need certain symbols, numbers, international characters or lower case characters that are not found on the Alphanumeric Keyboard. For example, if you require a space between words, or if you need the / symbol, or -, you use the round Number keys to type the correct alphanumeric code. See the Alphanumeric Code Chart shown in the next section.

## Important

If you enter the wrong character, press the Void key to backspace and delete that character. Now you can continue.

## Alphanumeric Code Chart

Many characters are also available. Use the tables in this section to help you find the ones you need.

Use the following table for lower case letters and numbers. If you want to use double width characters, press 01 before each character.

For example, to program Y E S, type 01 Department Shift key Y 01 E 01 S. For more information, see Using Double Wide Characters on page 27.

Table 13 Letters and numbers

| Character | Code <br> Number | Character | Code <br> Number |
| :---: | :---: | :---: | :---: |
| Space | 00 | s | 20 |
| Wide Character | 01 | t | 21 |
| a | 02 | u | 22 |

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Table 13 Letters and numbers

| Character | Code Number | Character | Code <br> Number |
| :---: | :---: | :---: | :---: |
| b | 03 | v | 23 |
| C | 04 | w | 24 |
| d | 05 | x | 25 |
| e | 06 | Y | 26 |
| f | 07 | z | 27 |
| g | 08 |  |  |
| h | 09 | Numbers |  |
| i | 10 | 0 | 30 |
| j | 11 | 1 | 31 |
| k | 12 | 2 | 32 |
| 1 | 13 | 3 | 33 |
| m | 14 | 4 | 34 |
| n | 15 | 5 | 35 |
| $\bigcirc$ | 16 | 6 | 36 |
| p | 17 | 7 | 37 |
| q | 18 | 8 | 38 |
| r | 19 | 9 | 39 |

Use this table for punctuation and foreign characters.
Table 14 Special Characters and Punctuation

| Character | Code <br> Number | Character | Code Number |
| :---: | :---: | :---: | :---: |
| i | 80 | ? | 28 |
| ¿ | 81 | ! | 29 |
| á | 82 | @ | 40 |
| é | 83 | 1 | 67 |
| í | 84 | : | 68 |
| ó | 85 | \# | 69 |
| ú | 86 | \& | 70 |
| Ä | 93 | \% | 71 |
| Ü | 94 | \$ | 72 |
| Ö | 95 | ( comma) | 73 |
| $\ddot{\text { İ }}$ | 96 | $($ | 74 |
| ü | 97 | ) | 75 |
| $\tilde{\mathrm{N}}$ | 98 | * | 76 |
| ñ | 99 | + | 77 |
|  |  | - | 78 |
|  |  | (period) | 79 |
|  |  | $\begin{gathered} \text { (semi colon) } \end{gathered}$ | 87 |
|  |  | > | 88 |
|  |  | (apostrophe) | 89 |
|  |  | " | 90 |
|  |  | $<$ | 91 |
|  |  | $=$ | 92 |

## Scrolling Messages

Your cash register shows messages that move across the display when the register is not in use. You can use the pre-programmed default messages or you can program your own. You can change one or more messages at any time. For example, if you have a new promotion, you can change the Idle 1 message to say something about the promotion. You can also control the speed at which the scrolling messages display.

## Types of Scrolling Messages

You can program the following types of scrolling messages
Table 15 Scrolling messages

| Message <br> Number <br> $\mathbf{1}$ <br> $\mathbf{2}$ <br> Message Type | OFF message | This message shows:. <br> position |
| :--- | :--- | :--- |
| $\mathbf{3}$ | SALEDE message | During the idle state when the register <br> is in PRG, X, or $\mathbf{Z}$ modes |
| $\mathbf{4}$ | IDLE message 1 | When the register is in the idle state <br> while in REG modes during the <br> morning hours * |
| $\mathbf{5}$ | IDLE message 2 | When the register is in the idle state <br> while in REG modes during the <br> afternoon hours * |

## Scrolling Message Length

You can program up to 42 characters in each scrolling message. Messages 4 and 5 (IDLE messages) can be combined to make a message with a maximum of 84 characters long.

## Default Scrolling Messages

The following messages display automatically.

| Off Message | CLOSED, NEXT REGISTER PLEASE |
| :--- | :--- |
| Mode Message | PLEASE WAIT |
| Sales Message | PLEASE TAKE YOUR RECEIPT |
| Idle Message 1 | GOOD MORNING |
| Idle Message 2 | GOOD AFTERNOON |

You can change these default messages, using the following instructions.

## Programming Scrolling Messages

Use the steps below to program your scrolling message.

## To program a scrolling message

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 6, press the number of the message you want to change, and press the Return key.

For example, to change the message that displays when you move the Mode key to the Off position, press number 6, 1, and Return.
4 Type your message, using either the Alphanumeric keys or the special codes. For more information about using the Alphanumeric keys to type letters, see Setting Alphanumeric Descriptions on page 23.

## Important

If you enter the wrong character, press the Void key to backspace and delete that character and then continue typing.

5 When you are done, press the Check key. You can program another message by starting with step 3 .

## Sample Scrolling Messages

Here are some samples of messages that you can program:
ASK ABOUT OUR DAILY SPECIALS
WE DELIVER
10\% DISCOUNT ON THURSDAYS
FREE SODA WITH ANY SANDWICH ORDER STORE HOURS 9AM TO 10 PM

## Programming Scrolling Message Display Times

After you have programed your scrolling message, you can set the length of time you want the message to run.

After you are done, you can check your results. See Running the Program Confirmation Report on page 80.

## Setting the Off Message Start Time

OFF message

Number of seconds after the register is
Settings in turned off before the message starts.
seconds: 00-99
Default=05
To stop the message after it starts, press the Feed key.

## To program the Off message time setting

1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 1, press the number of seconds you want to delay as 2 digits, and press the Charge key.

## Setting the Mode Message Start Time

MODE message Number of seconds before the Settings in register turns into idle mode in seconds: 00-99 PRG, X, Z modes and the Default=05 message starts.

This message does not display in REG modes.

## To program the Mode message time setting

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 2, press the number of seconds you want to delay as 2 digits, and press the Charge key.

## Setting the Sales Message Start and Stop Times

SALES message start

Number of seconds after a sale is complete before the message starts.

Settings in seconds: 00-99
Default=10

The register must be set in REG mode.

## To program the Sales message start time setting

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.


3 Using the round Number keys, press 3, press the number of seconds you want to delay as 2 digits, and press the Charge key.

SALES message Number of seconds the Sales Settings in
stop
message runs before the Idle message starts.

The register must be set in REG mode.
seconds: 00-99
Default=20
$00=$ No Sales
message appears

## To program the Sales message stop time setting

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 4, press the number of seconds you want to delay as 2 digits, and press the Charge key.

## Setting the Idle Messages Start Time

Idle message display after the time appears

Number of seconds for the Time to appear before the Idle message appears again.

When the Time changes while an Idle message is running, the time appears for a few seconds. After the specified time, the Idle message appears again.

Settings in seconds: 0-9 0 does not show the time at all. Default=5

To program the Idle message display after the time appears
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
check
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 50, press the number of seconds you want to delay as 1 digit, and press the Charge key.

| Idle message | Setting the Idle message to 0 <br> pattern <br> runs Idle message 1 in the AM <br> and Idle message 2 in the PM. | Settings: $0-1$ <br> Default=0 |
| :--- | :--- | :--- |
|  | Setting the Idle message to 1 <br> combines both Idle messages <br> and runs them all day. |  |

## To program the Idle message display pattern

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 60, press 0 or 1 for your message display choice, and press the Charge key.

## Setting the Amount of Time Message Letters Appear in the Display

You can set the amount of time letters appear in the display. The shorter amount of time, the faster the message scrolls across the display.

To program the amount of time letters appears
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 70. Press one digit number from the chart below, representing the number of seconds you want to delay, and press the Charge key.

| Press this number... | To specify... |
| :--- | :--- |
| 0 | 0.2 seconds |
| 1 | 0.3 |
| 2 | 0.4 - Default |
| 3 | 0.5 |
| 4 | 0.6 |
| 5 | 0.7 |
| 6 | 0.8 |
| 7 | 0.9 |
| 8 | 1.0 |

## Programming the Credit Keys

You can use 2 department keys as credit card-only keys. You can use one or both keys if you want. For example, you can set Department 19 to be a Visa ${ }^{\circledR}$ card and Department 20 to be a MasterCard ${ }^{\circledR}$. You can also program the cash register to print the name of the credit card on the receipt or journal tape.

When you ring up a sale, you can use Department 19 or Department 20 to finalize the credit card sale, open the cash drawer, and print the receipt or journal tape.

You must set Flag 16 Option Number 1, 2, or 3 to use this feature. For more information about setting Flags, see Programming Flag Options on page 65 .

## Note

If you want to use Departments 19 and 20 as credit card keys, they no longer work as department keys until you set Flag 16 back to 0.

To program a credit key
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 To program a card name that prints on the receipt or journal tape, press 51 for Department key 20 or press 52 for Department key 19 and then press the Return key. If you do not program a card name, it prints as CREDIT 1 or CREDIT 2.

4 Type the name of the credit card just as you did when you programmed Department names. You can type up to 12 characters and spaces.
For example, to type VISA, press the following keys:
Press this key... To get this letter...


- For more information about using the Department keys to type letters, see Programming Department Keys on page 41.


## Important

If you enter the wrong character, press the Void key to backspace and delete that character. Now you can continue.

5 When you are done, press the Check key.

## Programming PLU Descriptions

The Price-Look Up system allows for fast, accurate entry of an item and automatically records the number of items sold. If you want to use the barcode reader, you can scan UPC codes to ring up items.

Each PLU must be programmed with up to a 12 character description that appears on the display and prints on the tape.

Programming PLUs consists of the following:
1 Assign a PLU number (from 1 to a maximum of 12 digits long) to each sales item or scan the UPC barcode.

2 Assign a price.

3 Link the PLU to a department key with the appropriate Tax Status for that PLU.
4 Enter a description for the PLU. You must enter a description, even if it is as simple as PLU4.
For example, if PLU \#1 is a taxable item, you can link it to a Department key which is set up for tax. If PLU \#2 is not a taxable item, you can link it to a Department key which is programmed for no tax.

## Important

You do not need to press the decimal point key when entering a price.
After you are done, you can check your results. See Running the PLU Confirmation Report on page 82.

## Programming PLUs without a Barcode Reader

You can program PLUS without using a barcode reader. Use the following instructions.

To program PLUs without a barcode reader
Example 12: Set PLU \#1 with a $\$ 2.99$ price, linked to Department 1, description of APPLE
1 Put the PRG key in the Mode key slot and turn it to the PRG position.

Press the Qty/Date key to begin programming the PLUs. The PLU prompt appears on the display.
4 Using the round Number keys, press 1 and press the PLU key.
5 Using the round Number keys, press 299 and then press the Department 1 key. For more information about using the department keys, see Assigning Department Number Keys on page 46.

6 Press the keys to spell APPLE, using the Alphanumeric keys or the Alphanumeric Code Chart, if needed. For an explanation of how to use the Department keys to spell words, see Setting Alphanumeric Descriptions on page 23. The Department Shift key lets you use the letters in the lower green area on the Department keys.


To make a space to separate words, press the round Number 0 key twice or press the round Number 00 key one time.
You must enter a description, even if it is as simple as PLU4.

## Important

void
If you enter the wrong character, press the Void key to backspace and delete that character and then continue.

7 Press the Check key. The PLU information is saved in the cash register.
If you want to program more PLUs, repeat steps 4 through 7.
qty/
8 When you are done programming PLUs, press the Qty/Date key.

## Programming PLUs with the Barcode Reader

You can use the barcode reader to scan items and automatically ring them up. Using the barcode reader reduces errors caused by people ringing up items incorrectly. The barcode reader must be held about $1 / 2$ inch or closer above the UPC symbol on the product to read the UPC symbol properly.

To program PLUs using the barcode reader
Example 13: Set a UPC symbol to a $\$ 2.99$ price, linked to Department 1, description of BOOK
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Press the Qty/Date key to begin programming the PLUs.
4 Using the barcode reader, scan the UPC you want for this PLU. Hold the barcode reader less than $1 / 2$ inch from the UPC you want to scan. Press the button on the bottom of the reader to read the UPC. The barcode reader beeps.
5 Using the round Number keys, press 299 and then press the Department 1 key. The PLU name appears on the display. For more information about using the department keys, see Assigning Department Number Keys on page 46.

6 Press the keys to spell BOOK, using the Department keys or the Alphanumeric Code Chart, if needed. For an explanation of how to use the Department keys to spell words, see Setting Alphanumeric Descriptions on page 23. The Department Shift key lets you use the letters in the lower green area on the Department keys.


To make a space to separate words, press the 0 key twice or press the 00 key one time.
You must enter a description, even if it is as simple as PLU4.

## Important

If you enter the wrong character, press the Void key to backspace and delete that character and then continue.

7 Press the Check key. The PLU information is saved in the cash register.
8 Repeat steps 4 through 7 to program more PLUs.
9 When you are done programming PLUs, press the Qty/Date key.

## Setting the Decimal Points

The decimal point is set by selecting from the following 4 options:
This decimal point... Looks like...

| zero decimal point | $0=\$ \mathrm{X}$ |
| :--- | :--- |
| one decimal point | $1=\$$ X.X |
| two decimal point | $2=\$ \mathrm{X} . \mathrm{XX}$ (U.S. Standard) |
| three decimal point | $3=\$$ X.XXX |

After you program the decimal point, you do not need to specify a decimal when you ring up sales. If you try to use a decimal point, you hear an error beep.

After you are done, you can check your results. See Running the Program Confirmation Report on page 80.

To program the decimal points
Example 14: Program the Decimal Point For Option \$X.XX, 2 decimal places, normally used in the United States
1 Put the PRG key in the Mode key slot and turn it to the PRG position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 2 and then press the -\%/RA key

## Setting the Rounding Rates

You may want to sell 2 items for an odd number price. If someone wants to purchase that item, they cannot pay you a half cent, so you need the cash register to round the half cent to the next nearest penny.

You can select from the following options to set the rounding.
Table 16 Rounding
This number... Rounds to this...

| 00 | Numbers from $.1-.9$ to 0 |
| :--- | :--- |
| 50 | Numbers from $.5-.9$ to 1 (U.S. Standard) |
| 99 | Numbers from $.1-.9$ to 1 |

After you are done, you can check your results. See Running the Program Confirmation Report on page 80.

To set the rounding
Example 15: Program rounding to 50, normally used in the United States
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 50 and then press the Charge key.

## Programming Discounts

Sometimes you want to have discounts assigned automatically. For example, when you have a sale, you may want to be able to apply a $10 \%$ discount to certain items.

## Programming Minus Percentage Discounts

You may want to deduct a percentage rate from the usual rate of an item, such as an employee discount. The Minus Percentage Discount [ $-\% /$ RA] subtracts a percentage rate from an individual item. You can program the rate or you can enter it by hand each time. Regardless of how you specify a discount, the discount you enter must always be 4 digits. For example, you enter a $25 \%$ discount as 2500 .

You can also set it so that the Minus Percentage Discount amount is not subtracted from the department totals on the Management Reports. For more information, see Flag 23 on page 68.

After you are done, you can check your results. See Running the Program Confirmation Report on page 80.

To program a Minus Percentage Discount [-\%/ra]
Example 16: Program the Percentage Discount rate of $10 \%$
1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 10000 and then press the -\%/RA key.
You must always enter the percentage rate as a 4-digit number without the decimal point, representing 00.00 through 99.99.

## Note

See Minus Percentage Discount Sale on page 112 to ring up a Minus Percentage Discount sale.

## Programming Coupon Discounts

You can use the Coupon Discount (CPN) key to subtract a specific amount from an individual item. You can enter a coupon in the middle of a transaction or by itself in a transaction.

After you are done, you can check your results. See Running the Program Confirmation Report on page 80.

Programming the Coupon Discount key includes 2 steps:
1 Setting a High Digit Lock Out (HDLO) number
The High Digit Lock Out (HDLO) number limits the number of digits that can be rung up in a coupon discount. This prevents you from accidentally subtracting a large amount.

If large number of digits is entered, you hear an error beep and the keypad locks up. For example: To make sure no one can ring up more than $\$ 99.99$ on the Coupon Discount key, set the HDLO to 4.
Table 17 High digit lockout number (HDLO)

| This number... | From this... | to this... |  |
| :--- | :---: | :---: | :---: |
| 0 | $\$ .01$ | $\$$ | $99,999.99$ (Standard setting) |
| 1 | .01 | .09 |  |
| 2 | .01 | .99 |  |

Table 17 High digit lockout number (HDLO) (Continued)

| This number... | From this... | to this... |
| :--- | :---: | ---: |
| 3 | .01 | 9.99 |
| 4 | .01 | 99.99 |
| 5 | .01 | 999.99 |
| 6 | .01 | $9,999.99$ |

2 Setting the Tax Status.
The tax status determines how you want the tax rate to be charged when using the Coupon Discount key. Contact your local tax authorities to learn your local tax requirements.
The options are:

- To charge tax on the original amount of an item (the amount before the coupon is deducted).
- To charge tax on the discounted amount of an item (the amount after the coupon discount is deducted).

Note
If you have no tax rate programmed in the cash register, use 00 from the Tax Status Numbers table.

The following Tax Status numbers are used to link the Tax Status to the Coupon Discount key.
Table 18 Tax Status Numbers

| Number | Taxable by... | To charge the... |
| :--- | :--- | :--- |
| 00 | Non-Taxable | • If no tax is programmed in the cash register, or <br>  <br> - If you want to charge tax on the original <br> amount of an item (the amount before the <br> coupon is deducted). |
| 01 | TAX 1 | TAX 1 rate on the discounted amount of an <br> item. * |
| 02 | TAX 2 | TAX 2 rate on the discounted amount of an <br> item. |
| 03 | TAX 3 | TAX 3 rate on the discounted amount of an <br> item. |
| 04 | TAX 4 | TAX 4 rate on the discounted amount of an <br> item. |
| 05 | TAX 1 and <br> TAX 2 | TAX 1 and TAX 2 rates on the discounted <br> amount of an item. ${ }^{*}$ |

Table 18 Tax Status Numbers (Continued)

| Number | Taxable by... | To charge the... |
| :--- | :--- | :--- |
| 06 | TAX 1 and <br> TAX 3 | TAX 1 and TAX 3 rates on the discounted <br> amount of an item. ${ }^{*}$ |
| 07 | TAX 1 and <br> TAX 4 | TAX 1 and TAX 4 rates on the discounted <br> amount of an item. ${ }^{*}$ |
| 08 | TAX 2 and <br> TAX 3 | TAX 2 and TAX 3 rates on the discounted <br> amount of an item. ${ }^{*}$ |
| 09 | TAX 2 and <br> TAX 4 | TAX 2 and TAX 4 rates on the discounted <br> amount of an item. ${ }^{*}$ |
| 10 | TAX 3 and <br> TAX 4 | TAX 3 and TAX 4 rates on the discounted <br> amount of an item. ${ }^{*}$ |
| 11 | TAX 1, TAX 2 <br> and TAX 3 | TAX 1, TAX 2 and TAX 3 rates on the <br> discounted amount of an item. ${ }^{*}$ |
| 12 | TAX 1, TAX 2 <br> and TAX 4 | TAX 1, TAX 2 and TAX 4 rates on the <br> discounted amount of an item. ${ }^{*}$ |
| 13 | TAX 1, TAX 3 <br> and TAX 4 | TAX 1, TAX 3 and TAX 4 rates on the <br> discounted amount of an item. ${ }^{*}$ |
| 14 | TAX 2, TAX 3 <br> and TAX 4 | TAX 2, TAX 3 and TAX 4 rates on the <br> discounted amount of an item. ${ }^{*}$ |
| 15 | TAX TAX <br>  <br> TAX 4 | TAX 1, TAX 2, TAX 3 and TAX 4 rates on the <br> discounted amount of an item. ${ }^{*}$ |
| * the amount after the coupon is deducted |  |  |

To program the Coupon key
The following examples show the most commonly used options in programming the Coupon Discount key.

## Method 1

You can select if no tax is programmed in the cash register or if you want to charge the tax rate on the original amount of an item (the amount before the coupon is deducted).

Example 17: If HDLO is set to 0 , and the Tax Status Number is set to 0 (non-taxable)
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 000 and then press the Cpn key.

## Note

See page 109 to ring up a coupon sale programmed with Method 1.

## Method 2

You can select if you want the tax rate to be charged on the discounted amount of an item (the amount after the coupon is deducted).

Example 18: If HDLO is selected for 0 , and the Tax Status is selected for 1 (taxable by TAX 1):
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 001 and then press the Cpn key.

## Note

See page 109 to ring up a coupon sale programmed with Method 2.

## Programming Plus Percentage Add-ons

You may want to add an automatic amount to the total, such as a fixed tip or other service charge. Plus Percentage adds a fixed rate additional charge to an individual item. You can program the rate or you can enter it by hand each time. Regardless of how you specify the Plus Percentage, the amount you enter must always be 4 digits. For example, you enter a $25 \%$ Plus Percentage as 2500.

When you use the Plus Percentage/Add-On key, the words Add-on appear on the display and print on the receipt.

You can also set the cash register so that the Plus Percentage amount is not added to the department totals on the Management Reports. For more information, see Flag 23 on page 68.

After you are done, you can check your results. See Running the Program Confirmation Report on page 80.

To program the Plus Percentage [+\%/PO] key
Example 19: Program a $10 \%$ add-on
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 10000 and then press the $+\% / \mathbf{P O}$ key.
You must always enter the percentage rate as a 4 -digit number without the decimal point, representing 00.00 through 99.99.

## Note

See Plus Percentage Sale on page 115 to ring up a Plus Percentage sale.

## Programming Flag Options

Flag options are actions you can set for the cash register. These actions include how the date appears, if the tax rate prints on receipts, if clerk numbers are used, and so on.

34 Flags are available on your cash register. The Flags are preset by the factory to meet the most commonly used actions. Each Flag setting can be changed or updated at any time, if needed.

## Note

All Flag action are factory preset at 0 , except for Flags 15, 18, 21, 27, 28, 30, $32,33,34,37$, and 39 which have a default setting of 1 . Flag actions only need to be changed if you want to change any action from the default setting.

If you change the language after programming is complete, descriptions like logo, department and PLU names revert to their default descriptions and you must reprogram them. The numeric amounts that you programmed do not change.

## Note

If you program custom messages or department descriptions, changing languages does not translate those messages. Instead, they are deleted and reset to the factory default for the message or description. Before you program your messages, select the language you want the cash register to be in.

After a Full System Clear, all settings go back to the default settings.
To program flag options
Example 20: Select 1 for Flag 3 (Tendering of change is required)
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press 31 and then press the Void key. Flag \#3 is now set with Action 1.
The following table shows all Flags and the actions. Bold numbers are the default.

Table 19 Flag options

| This Flag number... | Sets these actions... | $\begin{aligned} & \text { Set } \\ & \text { to... } \end{aligned}$ |
| :---: | :---: | :---: |
| 1 | The Grand Total does not reset after a Z reading. | 0 |
|  | The Grand Total resets after a Z reading. | 1 |
| 2 | Subtotal prints on sales receipts when \#/ST/NS key is pressed. | 0 |
|  | Subtotal does not print on sales receipts when \#/ST/NS key is pressed. | 1 |
| 3 | Tendering of change is not required. | 0 |
|  | Tendering of change is required. | 1 |
| 4 | The Date prints as Month-Day-Year. | 0 |
|  | The Date prints as Day-Month-Year. | 1 |
| 5 | Z1 and Z2 Counter Numbers do not reset after a Z1 or Z2 report. | 0 |
|  | Z1 and Z2 Counter Numbers reset after a Z1 or Z2 report. | 1 |
| 6 | Tax Rate Amount prints on sales receipts. | 0 |
|  | Tax Rate Amount does not print on sales receipts. | 1 |
| 7 | Skips amounts equaling zero on financial reports. | 0 |
|  | Does not skip amounts equaling zero on financial reports. | 1 |
| 8 | The Date prints on sales receipts and management reports. | 0 |
|  | The Date does not print on sales receipts and management reports. | 1 |
| 9 | The Time prints on sales receipts and management reports. | 0 |
|  | The Time does not print on sales receipts and management reports. | 1 |

Table 19 Flag options (Continued)

| This Flag number... | Sets these actions... | Set <br> to... |
| :---: | :---: | :---: |
| 10 | The Consecutive Number prints on the receipt. | 0 |
|  | The Consecutive Number does not print on the receipt. | 1 |
| 11 | The Clerk Name prints on sales receipts. | 0 |
|  | The Clerk Name does not print on sales receipts. | 1 |
| 12 | Clerk System inactive. | 0 |
|  | Clerk System active. | 1 |
| 13 | USA Tax System. | 0 |
|  | Canadian Tax System. | 1 |
|  | VAT Tax System. | 2 |
| 14 | Z1/Z2 Counter prints. | 0 |
|  | Z1/Z2 Counter does not print. | 1 |
| 15 | Tax amount prints after the sales total on the sales receipt. | 0 |

Tax amount prints before the total amount on the 1 sales receipt.

| 16 | Standard Department Keyboard layout. | 0 |
| :---: | :---: | :---: |
|  | Department 20 is Credit 1. | 1 |
|  | Department 19 is Credit 2. | 2 |
|  | Department 20 is Credit 1 and Department 19 is Credit 2. | 3 |
| 17 | Sets the non-Taxable Limit without GST tax for Canadian tax mode. | 0 |
|  | Sets the non-Taxable Limit with GST tax for Canadian tax mode. | 1 |
| 18 | Time appears on the display and prints in 24 hour mode. | 0 |
|  | Time appears on the display and prints in 12 hour ( $\mathrm{am} / \mathrm{pm}$ ) mode. | 1 |

Table 19 Flag options (Continued)

| This Flag number... | Sets these actions... | $\begin{aligned} & \text { Set } \\ & \text { to... } \end{aligned}$ |
| :---: | :---: | :---: |
| 19 | Sets the language for the cash register. The options are: |  |
|  | English | 0 |
|  | Spanish | 1 |
|  | French | 2 |
|  | German | 3 |
| 20 | A Clerk Number is not required before each transaction. | 0 |
|  | A Clerk Number is required before each transaction. | 1 |
|  | Note <br> Flag \# 12 must be set to 1 so the clerk system is active any setting for Flag \# 20 can take effect. | before |
| 21 | Receipt printer is turned ON in Reg2 mode. | 0 |
|  | Receipt printer is turned OFF in Reg2 mode. | 1 |
| 22 | Do not select Canadian tax system of Tax on Tax | 0 |
|  | Select Canadian Tax on Tax system. | 1 |
|  | Select Canadian Tax on Tax on Tax system. | 2 |
|  | Note <br> Flag \# 13 must be set to 1 before setting this flag. |  |
| 23 | $-\%$ is subtracted and $+\%$ is added to department totals on $\mathrm{X} / \mathrm{Z}$ readings. | 0 |
|  | $-\%$ is not subtracted and $+\%$ is not added to department totals on $\mathrm{X} / \mathrm{Z}$ readings. | 1 |
| 24 | TAX amounts print separately on sales receipts. | 0 |
|  | TAX amounts print as one figure on sales receipts. The letters "TX" print next to the total of tax. | 1 |
| 25 | Duplicate Z report can be printed. | 0 |
|  | Duplicate Z report cannot be printed. | 1 |
| 26 | Consecutive receipt number resets after Z1 Report. | 0 |
|  | Consecutive receipt number does not reset after Z1 Report. | 1 |


| This Flag number... | Sets these actions... | Set to... |
| :---: | :---: | :---: |
| 27 | 0 price registration is allowed. | 0 |
|  | 0 price registration is not allowed. | 1 |
| $28$ <br> (Europe Only) | Euro convert function is allowed. | 0 |
|  | Euro convert function is not allowed. | 1 |
| 29 | Tax rate does not print on financial report in VAT mode. | 0 |
|  | Tax rate prints on financial report in VAT mode. | 1 |
| $30$ <br> (Europe Only) | Print converted total at convert tender. | 0 |
|  | Print converted total always tender. | 1 |
| $31$ <br> (Europe Only) | Local base currency. | 0 |
|  | Euro base currency. | 1 |
| 32 | Allow Clerk numbers without security code. | 0 |
|  | Clerk must also enter the 3 digit security code. | 1 |
| 33 | The Header message does not print. | 0 |
|  | The Header message prints. | 1 |
| 34 | Second receipt cannot be issued. Receipt reprint option disabled. | 0 |
|  | Second receipt can be issued. Receipt reprint option enabled. | 1 |
| 35 | Only transaction totals for each receipt are stored in the Electronic Journal. | 0 |
|  | Line-by-line transaction details for each receipt are stored in the Electronic Journal. | 1 |
|  | Note <br> Flag \# 36 must be set to 0 (active) before any setting <br> Flag \# 35 can take effect. |  |
| 36 | Activate Electronic Journal. | 0 |
|  | De-activate Electronic Journal. | 1 |

Table 19 Flag options (Continued)

| This Flag number... | Sets these actions... | Set <br> to... |
| :---: | :---: | :---: |
| 37 | Do not print Footer message at the bottom of the receipt. | 0 |
|  | Print Footer message at the bottom of the receipt. | 1 |
| 38 | Print blank lines in the Header and Footer. | 0 |
|  | Do not print blank lines in the Header and Footer. | 1 |
| 39 | Prints a blank line for that specific line of the Header message or Footer message. | 0 |
|  | Prints the factory default text for that one specific line of the Header message or Footer message. | 1 |

Note
Flags 28, 30 and 31 do not apply to the U.S. market.

## Ringing up Sales and Using Training Mode

After you set up your cash register, ringing up sales is easy. For information about ringing up complicated sales, see Examples on page 104.

If you want to learn about using the cash register without affecting the daily total, you can use the Training mode. You or someone else can learn how to use the cash register without creating real sales that show up on reports. For example, you can train a new person about using the department keys and completing sales.

Training mode lets someone use the cash register without actually recording the sales in the sales history. When you stop Training mode, the training sales information is deleted.

## Ringing up Sales

After you have the basics programmed in your cash register, you are ready to ring up sales. For more information about setting up the basics on your cash register, see Setting Up Your Cash Register - the Basics on page 22.

Reminder
Do not press the Decimal Point key when ringing up a price.

amount tend total

plu
amount tend total

To ring up straight sales without a PLU number
1 Put the REG key in the Mode key slot and turn it to the REG1 or REG2 position. You are ready to ring up a sale.
2 Using the round Number keys area, type the price of the first item.
3 Press the Department key for that item.
To use the Department keys above 40, do the following:

- Press the Dept Shift key.
- Using the round Number keys, type the Department number from 41 to 99 that you want to use. For example, for Department 63, press the 6 key and then press the 3 key.
- Press the Dept Shift key again.

4 Repeat for the rest of the items.
5 When you are done ringing up items, press the Amount Tend Total key. The cash drawer opens and the receipt or journal prints.
6 Make any change needed and place the money you are given in the cash drawer.

7 Close the cash drawer.
8 Give the customer the receipt, if the cash register is set to print receipts. You are ready to ring up another sale.

To ring up straight sales with a PLU number and not using the barcode reader
1 Put the REG key in the Mode key slot and turn it to the REG1 or REG2 position. You are ready to ring up a sale.
2 Using the round Number keys area, type the PLU number of the first item.

3 Press the PLU key.
4 Repeat for the rest of the items.
5 When you are done ringing up items, press the Amount Tend Total key. The cash drawer opens and the receipt or journal prints.
6 Make any change needed and place the money you are given in the cash drawer.

7 Close the cash drawer.
8 Give the customer the receipt, if the cash register is set to print receipts. You are ready to ring up another sale.

## Ringing up Sales with the Barcode Reader

You can also ring up sales using the barcode reader. Before you can ring up sales with the barcode reader, the UPC symbol must be programmed into the cash register with the barcode reader. For more information, see Programming PLUs with the Barcode Reader on page 58.

To ring up sales with the barcode reader


1 Put the REG key in the Mode key slot and turn it to the REG1 or REG2 position. You are ready to ring up a sale.

2 Put the barcode reader light over the UPC symbol, about $1 / 2$ inch or closer above the UPC symbol on the product to read the UPC symbol properly.

3 Press the button under the scanner. The barcode scanner makes a beep sound and the item appears on the display.

4 Continue using the barcode scanner to scan UPC symbols until you are done.

5 When you are done, press the Amount Tend Total key. The cash drawer opens and the receipt or journal prints.
6 Make any change needed and place the money you are given in the cash drawer.

7 Close the cash drawer.
8 Give the customer the receipt, if you set the cash register to print receipts. You are ready to ring up another sale.

## Printing Receipts

REG1 turns the cash register on for all normal sales transactions. All features of the cash register are activated as programmed. A customer receipt is printed for every transaction.

REG2 also turns on the cash register and allows all normal sales transactions just like REG1 mode. However, the built-in printer is turned-off so that customer receipts are not automatically printed. If you are a smaller merchant or business, you may not need to print or issue customer receipts. This controls the amount of receipt paper you use. In this case, you do not print a receipt for every transaction and only print a receipt for those transactions where one is required. You must have paper installed in the cash register even if you are using REG2 mode and are not printing receipts.

Depending on how the cash register is programmed, you can print receipts 2 ways:


- Automatic Receipt Print - Using REG1 mode, the sales receipt will print automatically for every transaction. You can print a duplicate copy of the previously printed customer receipt if one is necessary.

Put the REG key in the Mode key slot, turn it to the REG1 position, and complete the sales transaction. Before you start the next transaction or any other function, press the Amount Tend Total key for a duplicate copy of the customer receipt.

- Receipt on Demand - Using REG2 mode, a customer receipt is not printed automatically, but can be printed by manually requesting one. When REG2 mode is used with the printer turned off, this allows you to conserve receipt paper when the customer receipts are not required for every transaction.

Put the REG key in the Mode key slot, turn it to the REG2 position, and complete the sales transaction. Before you start the next transaction or any other function, press the Amount Tend Total key for a print-out of the customer receipt.
To use the Receipt on Demand feature, make sure the Flag options for Flag \#21 and 34 are both set to the factory default setting of 1.

$$
\begin{array}{ll}
\text { Flag \#21 } & 0=\text { REG2 mode set to Print mode. } \\
& 1^{*}=\text { REG2 mode set to Non-print mode. Customer receipts } \\
& \text { are not printed automatically during a sales transaction. }
\end{array}
$$

$\begin{array}{ll}\text { Flag \#34 } & 0=\text { Disable printing of duplicate receipts } \\ & 1^{*}=\text { Allow printing of a duplicate receipt for previous } \\ & \text { transaction }\end{array}$

## Using Training Mode

We provide examples to help learn how to use this cash register. For information about the examples, see Examples on page 104. Using the examples can help you learn to use the cash register and the available features.

You can start Training mode at any time because it does not record activity in the machine totals.

When you are using the cash register in Training mode, you cannot use any of the operations in the PRG, X , or Z modes. The transaction numbers and amounts do not count in the Register mode until you stop Training mode.

When the cash register is in Training mode, asterisks **** print instead of transaction numbers. When you stop Training mode, the transaction numbers continue from the last number printed before you entered Training mode.

When the cash register is in Training mode, a small light appears in the left digit of the Clerk display. Some transactions may also print DEMO on the receipt.

## To start Training mode

1 Put the PRG key in the Mode key slot and turn it to the PRG position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 666666 and then press the Amount Tend Total key.

4 Now you can move the Mode key to the REG1 or REG2 position so training can start.

To stop Training mode
1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 555555 and then press the Amount Tend Total key.

4 Now you can move the Mode key to the REG1 or REG2 position and use the cash register.

## Programming Complex Tax Rates

Your cash register can manage complex tax rates and assignments. This chapter explains how to do this.

Many people do not need the information in this chapter. If this information does not relate to your business needs, you can skip it. If some information is related to your specific needs, then skip any sections which you do not need to set up your cash register.

If you do not know your sales tax rate and base amount, contact your local government office and ask for your local tax chart. The base tax amount is the maximum point where no tax is charged. Your cash registers defaults to a base tax amount of 10 cents. If your base tax amount is other than 10 cents, see Calculating State Tax Table Codes on page 125.

When you set up your cash register, you programmed the cash register to use a simple sales tax, appropriate for your area. Chapter 2 explains how to program a simple sales tax. Chapter 5 explains how to set up sales tax related to departments or PLUs.


## Note

If you hear an error tone while you are programming, press the Clear key and continue by repeating the step.

You do not need to reprogram all options if you want to update or change one thing. Save this manual in a safe place so you have it for future programming. After you are done programming, you can print Confirmation Reports to check your results. For more information, see Running Reports on page 80.

## Setting the Tax Rates

You can program 4 different tax rates on your cash register. Each tax rate can be linked directly to a department key (see Programming Tax Status on page 44), or by pressing the Tax 1 or Tax 2 keys before ringing up an entry.

You can set the cash register to not print the tax rate on receipts. For more information, see Programming Flag Options on page 65.

You can program each Tax Rate as follows:

- As an ADD-ON RATE (used in the USA) - means the tax amount is added onto the price of the item sold. Add-on Tax is most common in the United States. Add-on Tax can be programmed as either a fixed-rate which charges tax based on a percentage, or using the tax table codes, which is a calculation based on an approved tax chart issued by your local or state government.
- Canadian Tax System - allows you to program the Goods and Services tax (GST) and Provincial Sales Tax (PST) tax system required in Canada.
- VAT (Value Added Tax) - means that the tax amount is included in the price of the item.

After you have the tax table codes for your state, see Calculating State Tax Table Codes on page 125 for help or contact your local state government office for the current tax rates.

To program a basic tax rate, see Programming the Sales Tax on page 10.
To program a second fixed tax rate
Example 21: To set Tax 2 for 7\%
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys area, press 2, then press the Tax 1 key.
4 Using the round Number keys area, press 7000, then press the Amount Tend Total key.

To program add-on tax table rate
Example 22: The tax code for Arizona's tax rate of 4\% is:
121-240096-13-19-23-27-27-1029-25-25-25-1025
1 Put the PRG key in the Mode key slot and turn it to the PRG position.

2 If you are prompted for a Manager Password, type the password number
check

If you make a mistake during programming the State Tax Table Codes, press the Clear key and begin again with Step 3.

To program a second add-on tax rate
Example 23: Tax code for Arizona's tax rate of 5\% is:
101-190095-11-17-20-21-1021-20-20-20-20-1020
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step. and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys area, press 1 and press the Tax 1 key.
4 Using the round Number keys area, press 121 and press the Tax 2 key.
5 Using the round Number keys area, press 240096 and press the Tax 2 key.

6 Continue typing any State Tax Table Codes you need. Press the Tax 2 key after each code until you are done.

## Note

3 Using the round Number keys area, press 2 and press the Tax 1 key.
4 Using the round Number keys area, press 101 and press the Tax 2 key.
5 Using the round Number keys area, press 190095 and press the Tax 2 key.

6 Continue typing any State Tax Table Codes mentioned and press the Tax 2 key after each code until finished.

## Confirmation Report

To check your results, see Running the Program Confirmation Report on page 80.

To program a VAT tax rate (commonly used in Europe)
You must program Flag 13, as follows:
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys area, press 132 and press the Void key.

## To program a First VAT tax rate

Example 24: 10\% Tax Programming
1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys area, press 1, press the Tax 1 key, press 10000 , then press the Tax 2 key.

To program a Second VAT tax rate
Example 25: 5\%
1 Put the PRG key in the Mode key slot and turn it to the PRG position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.


3 Using the round Number keys area, press 2, press the Tax 1 key, press 5000 , and then press the Tax 2 key.

## Running Reports

Your cash register includes many reports. In this chapter, we explain:

- Programming confirmation
- The assigned Department keys
- The assigned PLUs
- The tax status of departments and PLUs
- Management reports, such as sales totals


## Running the Program Confirmation Report

The Program Confirmation Report allows you to check your programming results. For more information about programming the cash register, see Chapter 5 Setting Up Your Cash Register - Advanced on page 40 .

## To run a program confirmation report

1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 999999 and then press the Amount Tend Total key.

An example Program Confirmation Report is show below. The figures shown in this example are randomly selected. Your report shows you the specific information about the programming for your cash register.


Note
Flags 28, 30 and 31 do not apply to the U.S. market.
Table 20
This code... Means this...

| T1 | Taxable status programmed with a single tax rate. |
| :--- | :--- |
| T2 | Taxable status programmed with a second tax rate. |
| T3 | Taxable status programmed with Tax 3 rate. |
| T4 | Taxable status programmed with Tax 4 rate. |
| TX | Taxable status programmed with more than 1 tax rate. |

## Running the Department Confirmation Report

You can print a report that shows the programmed information for a range of departments. This is helpful if you want to see the programmed names of some of the departments, but do not need to see all other programming information.

You can also print a report that shows department information and sales. For more information, see Running the Department Sales Report on page 83 .

To run a department confirmation report
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Using the round Number keys, press 88.
4 Using the round Number keys, press the number of the first department you want to see. For example, 01.

5 Using the round Number keys, press the number of the last department you want to see. For example, 15.
6 Press the Amount Tend Total key.

## Running the PLU Confirmation Report

The PLU Confirmation Report allows you to check all PLUs programmed. For more information about programming PLUs, see Programming PLU Descriptions on page 56.

To run the PLU confirmation report
1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Press the PLU key.

An example PLU Confirmation Report is show below. Your report shows you the specific information about your programming.


## Running the Department Sales Report

The Department Sales Report allows you to check the current sales information for specified departments.

To run a Department sales report
1 Put the Z key in the Mode key slot and turn it to the X position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Using the round Number keys, press the number of the first department you want to see. For example, 01.
4 Using the round Number keys, press the number of the last department you want to see. For example, 15.

5 Press the Amount Tend Total key. The Department Sales report prints.

## Running Management Reports

The cash register maintains totals of all transaction information. This information is saved in the memory of the cash register as long as the register is plugged in to an electrical outlet or, if the cash register is unplugged, the batteries are charged.

Management reports show you information about how sales are progressing. You can run most reports with the Mode key in either the X position or the Z position. See Running a Financial Report on page 86 for instructions to run X and Z reports.

- X reports are run during the day to check transactions. These reports do not clear the transaction memory in the cash register. You can run all reports in the X position.
- Z reports are run at end of day, end of the week, or end of the month. These reports do clear the transaction memory in the cash register.

When you are done printing these reports, the information only exists on the cash register tape. You can run almost all reports in the Z position.

To prevent someone from accidently printing these reports, a manager password can be set. After the password is set, these reports do not print until the password is entered. For information about setting manager passwords, see Setting X and Manager Passwords on page 35.

Besides passwords, the keys that came with your cash register are also a form of security. We recommend giving clerks the REG keys and giving managers the Z and PRG keys.

For additional security, only the Z and PRG keys can run Z reports. The REG key cannot run Z reports. This means that people with REG keys cannot run or clear the transaction history.

## About X Readings

There are two kinds of readings that can be taken in the X position: an X 1 reading and an X2 reading.

- X1 Reading - Commonly known as a mid-day reading. Use this position to print periodic readings of transaction totals during the course of the day. This reading position does not reset to zero.
- X2 Reading - Commonly known as a mid-week or mid-month reading. Use this position to print periodic readings of transaction totals during the course of several days. This reading position does not reset to zero.


## About Z Readings

There are two types of readings that can be taken in the Z position: a Z 1 reading and a Z 2 reading.

- Z1 reading - Commonly known as a end-of-day/daily-closeout reading. This reading prints all transaction data and sets all totals to zero, except the Running Grand Total.

You can also print a duplicate Z1 Report. This is useful if the register runs out of paper or if there is a power outage while the Z1 Report is printing. This feature can also be turned off by Flag setting 25. For more information about Flags, see Programming Flag Options on page 65.

- Z2 reading - Commonly known as a weekly or monthly reading. This reading prints transaction totals either on a weekly or monthly basis (not both) and resets all transaction totals to zero except the Running Grand Total.


## About Management Reports

The following management reports are available:

- Cash-in-Drawer Report - Only available in the X position. Tells you how much cash is in the drawer at the time of the report.
- Clerk Report - Prints total sales amounts of each Clerk Number.
- Financial Report - Includes totals of departments, tax, net sales, voids, returns, coupons, refunds, minus percentage, plus percentage, receipts-on-account, paid out, cash, check, charge. The running grand total appears only on Z Reports.
- Hourly Report - Provides total sales amounts rung up each hour.
- All PLU Report - Lists quantity and cost of each PLU number rung up.
- Department Range Report - Shows the sales information for the specified departments.
- Electronic Journal Report - Prints the information in the Electronic Journal. Can be run in the X or Z modes.
The different management reports available in the X and Z positions:

| This key <br> position... | Prints this <br> report <br> symbol... | This report is available... | This report is <br> also known as... |
| :--- | :--- | :--- | :--- |
| X | X 1 | Financial, PLU, <br> Department Range, Clerk, <br> Hourly, Cash-In-Drawer, <br> Electronic Journal | Mid-Day |
| X | X 2 | Financial | Mid-Week or <br> Mid-Month |
| Z | Z 1 | Financial, PLU, Clerk, <br> Hourly, Electronic <br> Journal | End-Of-Day or <br> Daily-Close-out |
| Z | Z 2 | Financial | Weekly or <br> Monthly |

## Running a Cash-In-Drawer Report

This report shows how much cash is in the cash drawer.

## To run a Cash-In-Drawer report

1 Put the Z key or the PRG key in the Mode key slot and turn it to the X position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Press the Qty/Date key. The Cash in Drawer report prints.

## Running a Clerk Report

The Clerk report shows sales by clerk number. For more information about setting clerk numbers, see Setting Clerk Numbers and Names on page 32 .

- A Clerk report in the X position shows sales up to the current hour.
- A Clerk report in the Z position shows sales for the entire day. A Clerk report must be closed out in the Z position.


## Note

If you are not using clerk numbers, then you cannot run a Clerk report. You hear an error beep when you press the Clerk key.

## To run a Clerk report

1 Put the Z key or the PRG key in the Mode key slot and turn it to the X or Z position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Press the Clerk key. The Clerk report prints.

## Running a Financial Report

The Financial report shows totals of departments, tax, net sales, voids, returns, coupons, refunds, minus percentage, plus percentage, receipts-on-account, paid out, cash, check, and charge. The running grand total appears only on Z reports.

You can run a copy of the Financial report in the Z position. If other keys are pressed after the first Z reading, the duplicate Z Report will not print. To turn off the duplicate Z Report printing feature, you must change Flag 25. For more information about Flags, see Programming Flag Options on page 65 .

## Important

A Financial Reading must be closed out in the $Z$ position.
For an example Financial report, see Financial Report Example on page 87.

## To print a Financial report

1 Put the Z key or the PRG key in the Mode key slot and turn it to the X or Z position.

## Note

If you use the $Z$ position, the history is reset in the cash register after the report is printed.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 Press the Amount Tend Total key.
To run a duplicate $Z$ report

## Note

Flag \# 25 must be set to the factory default setting of " 0 " for this feature to work.
You can only print one additional copy of the $Z$ report after printing the original.

1 Put the Z key or the PRG key in the Mode key slot and turn it to the Z position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Press the \#/ST/NS key and the Amount Tend Total key. The duplicate Z report prints.

To take a weekly or monthly financial report (Z2 or X2)
1 Put the Z key or the PRG key in the Mode key slot and turn it to the X or Z position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 In the round Number keys area, press 99 and the Amount Tend Total key. The report prints.

## Financial Report Example

Totals are calculated for the Management Reports in the following way.

- NET SALES TOTAL (NET) - Shows the true sales for the day. The Net sales total includes department total (DEPTTL), tax total (T1, T2, T3, T4), and less the coupon discount (COUPON) and less the percentage discount.


## Note

Minus percentage discount (DISCOUNT), voids (VOID/CORR) and returns/refunds (REFUND) are all deducted from the department totals and the plus percentage (ADD ON) is added to the department totals. If you do not want the percentage discount and plus percentage reflected in the department totals, see Flag 23 on page 68.

- GROSS SALES TOTAL (GROSS) - Shows the total of all sales registered. The Gross Sales Total includes net sales total (NET), coupon discount (COUPON), minus percentage discount (DISCOUNT), return/refund (REFUND), and void (VOID/CORR).


## Note

The Percentage Discount [-\%] must be done after each item, not on the subtotal amount, for the formula given above to balance as shown.

The Financial report looks like the following. Your specific report looks different, because of your unique cash register activity.


To reset the Z 1 counter
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
check
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 In the round Number keys area, press 1 and then press the $Z 1$ Counter starting number as 4 digits (for example 0001 ) and then press the Return key.

To reset the Z 2 counter
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 In the round Number keys area, press 2, then press the Z2 Counter starting number as 4 digits (for example 0001) and press the Return key.

To reset the grand total
1 Put the PRG key in the Mode key slot and turn it to the PRG position.


2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 In the round Number keys area, press 777777 and press the Amount Tend Total key. Enter the new amount (up to 12 digits) and press the Non Tax key.

To print a Department Range report
1 Put the PRG key in the Mode key slot and turn it to the X position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 In the round Number keys area, press the Starting Department number as 2 digits (for example 01). Press the Ending Department number as 2 digits and then press the Amount Tend Total key.

## Running an Hourly Report

The report shows the number of sales and the total sales amount for each hour. All hours print, even if no sales were made in an hour. Times print using a 24 hour format.

## Important

An hourly reading must be closed out in the $Z$ position.
To take an hourly report
1 Put the Z key or the PRG key in the Mode key slot and turn it to the X or Z position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
amount tend total

3 In the round Number keys area, press 11 and the Amount Tend Total key. The Hourly report prints.

## Running PLU Reports

The PLU report shows the quantity and cost of each PLU Number rung up. Only PLUs that had sales will print.

## Important

A PLU Reading must be closed out in the Z position.

To print a PLU report
1 Put the Z or PRG key in the Mode key slot and turn it to the X or Z position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.
3 Press the PLU key.
To print a PLU sales report, according to an assigned Department number range
1 Put the Z key or the PRG key in the Mode key slot and turn it to the X position.

2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 In the round Number keys area, specify the Starting Dept Number. It must be 2 digits; for example 01.

4 Enter the Ending Dept Number as 2 digits.
5 Press the PLU key. The sales history for the PLUs assigned to the departments in the specified range prints.

## Running an Electronic Journal Reports

The Electronic Journal can hold 5,460-lines of transactions in memory. When the cash register memory is full, no more transactions or information can be stored in memory. Transactions already in memory are kept in memory until the Electronic Journal record is printed in Z-mode or the memory is manually reset.

The Electronic Journal records in the internal memory the line-by-line details of all the transactions and items completed on the cash register and printed on the built-in printer. This includes all sales transactions, any reports run during the day and even using the \#/ST/NS key for no-sale rings to open the cash drawer.

The cash register warns you when the Electronic Journal memory is nearly full to let you finish the current transaction. Then you can print the Electronic Journal record to prevent any loss of information. When the memory is completely full, the cash register warns you and no additional transaction information can be saved.

You can print the entire Electronic Journal record on the printer in the cash register in either the X Mode or the Z Mode.

- X-Mode: You can print the Electronic Journal record anytime during the day. This prints what is currently in the Electronic Journal memory and does not reset the memory.
- Z-Mode: You can print the entire Electronic Journal record and reset the journal memory so everything in memory is erased after printing. Only run this report at the end of the day, after running the standard Z Report for the end-of-the-day sales totals.
Make sure there is a lot of paper on the receipt paper roll so the Electronic Journal reports can print completely.

You cannot download the Electronic Journal record to the PC using the serial connection.

## Print a Mid-Day Electronic Journal Report

You can print the Electronic Journal record at anytime during the day without resetting the memory.

To print in the X Mode
1 Turn the Mode key to the X position.
2 Using the round Number keys area, press 96.

3 Press the Amount Tend Total key.
The Electronic Journal record prints and the Electronic Journal memory is not reset.

## Print an End-of-Day Electronic Journal Report

You can print the Electronic Journal Z report at the end of the day. This report prints all transactions and clears the memory.

To print in the $Z$ Mode
1 Turn the Mode key to the Z position.
amount tend

2 Run the normal end-of-day reports, including a standard Z Report by pressing the Amount Tend Total key while in Z Mode.

3 Using the round Number keys area, press 96 to print the Electronic Journal record.

4 Press the Amount Tend Total key.
The Electronic Journal record prints and the Electronic Journal memory is cleared.

## Note

If you see a EJ - FULL ERROR message on the cash register, go to EJ -FULL Error on page 100 for help on what to do.

## Check the Electronic Journal Memory

To check the current status of the Electronic Journal memory for the number of lines used in memory and how many lines remain free:

1 Put the PRG key in the Mode key slot and turn it to either the REG1 or REG2 position.

2 Press the QTY/DATE key twice. The first press displays the date only.

3 The memory status with the number of lines that the memory can still accept appear on the operator display.

## Maintenance and Options

Follow these steps to make sure your cash register works well.

- Your register must remain uncovered when turned on. This allows the electronic components to properly cool.
- Use a dust cover when the register is not in operation and the control lock key is turned to the OFF position to protect mechanical components from dust.
- Keep beverages and other liquids away from the machine to avoid spills which can damage electronic components. Use the optional protective keytop cover to prevent damage to the cash register.
- Keep the cash register away from dust, dampness, or extreme hot or cold temperatures.
- To clean your cash register, use a soft dry cloth. Do not use harsh solutions containing alcohol or ammonia.
- After storing your cash register in extreme temperatures (below 32 degrees Fahrenheit or above 104 degrees Fahrenheit), allow the temperature inside the machine enough time to reach room temperature before turning it on.
- If you need electronic service, take the cash register to a Royal authorized service center. For more information, see Limited Warranty on page 137.


## Installing a New Paper Roll

As you use the cash register, you will need to replace the paper roll.Your cash register has a thermal printer that prints receipts for the customer or a journal tape. Use $2^{1 / 4}$ inch ( 57.5 mm ) wide standard thermal register paper.

To install the paper roll
1 Insert the PRG key and turn it to either REG1 or REG2.

- If you need a customer receipt, turn the Mode key to the REG1 position.
- If you do not need a customer receipt, turn the mode key to the REG2 position.
2 Unlock and open the Journal Compartment Cover. Grip the left side of the cover and gently pull upward. Remove the Journal Compartment Cover and set aside.

3 Remove the Journal Takeup spindle. Place the paper roll in the little round area at the bottom of the compartment. Make sure the paper feeds out from the bottom of the roll, towards the front of the cash register.


4 Grab the small handle on the right of the print roller. Push the little handle towards the back of the cash register and raise the roller bar up.
5 Lay the end of the paper across the printer as shown. Move the print roller down onto the paper and snap into place. Make sure both sides are snapped down.

- Press the Feed key until the paper catches and moves through the printer.
6 Do one of the following:
- If you do not need to print receipts:


Place the black plastic Journal Takeup spindle on its grooves above the Battery compartment. The spindle sits above the paper roll. Press the Feed key to move the paper through the printer about 10-12 inches. Push the paper through one of the narrow openings in the center of the Journal Takeup spindle. Press the Feed key until the paper catches and begins to wind securely around the Journal Takeup
 spindle. Replace the Journal Compartment Cover.

- If you want to print receipts:

Lay the customer receipt paper over the receipt slot and close the Journal Compartment Cover.

## Using the Battery System

Your cash register has a memory where information about your programming and transactions are stored. This memory stores the information that lets you print reports, such as the total sales for the day, week, or month. The cash register memory also stores information about any special programming you have done.

If your cash register is unplugged or if there is a power outage, the batteries keep the information in the memory until you plug the cash register into a power source or the power is restored.

To make sure the battery back-up protection is working, replace the batteries at least once a year. To help you remember, consider replacing the batteries on New Years Day. The cash register can be off or unplugged for as long as 700 hours (about 28 days) and the information in the memory is still there when you are ready to use the register again.

If there was a power outage, replace the batteries as soon as there is power again. DO NOT remove or replace the batteries until you plug the cash register into a power source and you see messages on the display.

If you will not use the cash register for an extended period of time, you can remove the batteries to prolong their life. However, all information in the cash register will be erased if you do this.

## Caution

You must plug the cash register in before installing or replacing the back-up batteries. All data is erased when you remove the batteries if the cash register is not plugged in before you remove the batteries.

To install or replace the batteries
1 Before you start, make sure you have 3 new AA batteries.
2 Open the Journal Compartment cover. Remove the cover and put it aside.

3 Move the paper roller up and out of the way. Grab the small handle on the right of the print roller. Push the little handle towards the back of the cash register and raise the roller bar up. You see a slope down to the paper compartment. The battery cover is located under the print roller bar, on the slope.
4 Remove the battery cover. Press the edge at the top of the cover and push to the back. The cover pops off.
5 Put the batteries in the slots. Make sure that the positive and negative ends are in the right place. The batteries have a little plus (positive) and
 minus (negative) sign on each end to help you.
6 Replace the battery cover. Slide the bottom tabs into the long slit in the bottom position and it snap the cover into place. Do not put the tabs in the 2 holes in the bottom of the compartment. The cover will not close and you will break the tabs.

## About the Serial Port

Your cash register includes a serial port on the right side of the cash register. You can connect items to the cash register using this serial port. You can only connect one device to the
 serial port at a time.

To use the barcode reader, you must connect it to the serial port. You can also connect a computer to the serial port to use the RegisterLink software.

To connect your computer to the serial port, you need a null-modem serial cable. If you purchased the Alpha 601, a serial cable was included in the box. If you purchased the Alpha 600 or if you lost your cable, you can purchase this cable directly from Royal or at any computer supply store.

The pin description for the serial port on the cash register is shown below.


| Pin No. | I/O | Signal Name | Abbreviation |
| :---: | :---: | :---: | :---: |
| 1 | NC |  |  |
| 2 | IN | Receive Data | RXD |
| 3 | OUT | Transmit Data | TXD |
| 4 | NC |  |  |
| 5 | N/A | Signal Grand | SG |
| 6 | NC |  |  |
| 7 | OUT | (Request to send) | RTS |
| 8 | IN | (Clear to send) | CTS |
| 9 | OUT(+5V) | Power supply for BCR | +5 V |

## Troubleshooting

Select and follow the procedure which best describes what is happening.

## Error Codes

You may see these errors on the display. This table explains what they are and how to fix them.

Table 21
The error message... Do this...

| P | $R$ | $I$ | $N$ | $T$ | $E$ | Paper jam or printer failure |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $E$ | $R$ | $R$ | $O$ | $R$ | Misoperation |  |
| $C$ | $L$ | $E$ | $R$ | $K$ | $\#$ | Enter clerk number |
| $E$ | $J$ | $F$ | $U$ | $L$ | $L$ | Electronic Journal Full |
| $E$ | $R$ | $R$ | $O$ | $R$ | Communication error |  |

## I Hear an Error Beep

Some error beeps are normal. See Error Codes on page 38 for more information about error codes.


1 Press the Clear key.
2 Turn the Mode key to the PRG, REG, X or Z position you were in before you got the error.

For example, if the last position you were in was REG, turn the key to the REG position and press the Clear key and then press the Amount Tend Total, Check, or Charge key to complete a sale. If your last position was PRG, turn the key to the PRG position and press the Clear key.

If the last thing you were doing was programming PLUs in the PRG mode, return the PRG key to the PRG position. Press Clear and then press Qty/Date to leave PLU programming mode.
3 Repeat the procedure you are trying to perform.

- If error still persists, perform a Half System Clear procedure. See Half System Clear on page 102.
- As a last resort, perform a Full System Clear procedure. See Full System Clear on page 103.


## Sec code error appears in PRG, X OR Z modes

This prompt means a Manager Password is programmed.
V Enter the password number and press Check.

## If Clerk E12 Displays In REG 1 or REG 2 Modes

This prompt means clerk numbers are programmed.
1 Enter the clerk number and press Clerk.
2 Enter the password and press Check.

## PE Printer Error or Paper End

Both prompts means there is a paper problem.
1 Check if you are out of paper.
2 Check for a paper jam. If so, carefully remove any paper obstructing the printer.

3 Check and make sure the paper was aligned properly in the printer and that the printer bar is snapped into place.

## Caution



Do not manually pull the paper. Always use the Feed key to remove or advance the paper. Do not use sharp or pointed instruments in the printer area. This can seriously damage the printer.

4 After the paper jam is successfully removed, press the Clear key. If PE still appears, turn the Mode key to the OFF position. Unplug the cash register, wait 10 seconds, and plug it back in.

5 If there is a FUNCTION error and an E appears on the display, press the Clear key.
6 If an FUNCTION error continues to appear, turn the Mode key to the last position (PRG, REG, X or Z ) you were in before the error appeared. If the last position you were in was REG, turn the Mode key to the REG position and press the Clear key, then press the Amount Tend Total, Check, or Charge key to complete a pending sale.
If your last position was PRG, turn the Mode key to the PRG position and press the Clear key.
7 As a last resort, follow the directions for a Full System Clear. See Full System Clear on page 103.

## EJ -FULL Error

This prompt means the Electronic Journal is full. The Electronic Journal can hold up to 5,460 lines of transactions. When the memory gets close to full, you see a bar in the lower left of the display and you hear a long beep.

When the memory is completely full, no more transactions can be saved and you see a message in the display that says E.J. -Full. If you are in the middle of a transaction, press the Clear key to clear the error message, and continue with the transaction. No additional transaction details or information can be stored in the Electronic Journal memory after you clear this error message.

To fix this, you need to print the Z report to clear the memory. It is very strongly recommended that immediately after the current transaction is finished, that you either print the Electronic Journal record in Z-Mode or manually reset the Electronic Journal record memory.

Before you start, make sure there is a lot of paper on the receipt paper roll so the Z Electronic Journal reports can print completely.

## Note

You cannot download the Electronic Journal record to the PC using the serial connection.

1 At the end of the day, turn the Mode key to the $Z$ position.

2 Run the normal end-of-day reports, including a standard Z Report by pressing the Amount Tend Total key while in Z Mode.

3 Using the round Number keys area, press 96 to print the Electronic Journal record.

[^0]4 Press the Amount Tend Total key.

The Electronic Journal record prints and the Electronic Journal memory is cleared.

To manually Rest the Electronic Journal memory

## Caution

This step cannot be undone. All information stored in the electronic journal memory is permanently deleted and cannot be recovered.

1 Turn the Mode key to the Z position.
2 Using the round Number keys area, press 280602.
3 Press the Amount Tend Total key.
The Electronic Journal memory is reset and all information stored in the memory is erased. A verification prints that the Electronic Journal reset and the memory is cleared.

## The Register Does Not Work at All

1 Be sure the cash register is plugged into a working electrical outlet and no other electrical device is using the same power source. Another electrical motor on the same circuit can keep the cash register from working properly.

- If error still persists, perform a Half System Clear procedure. See Half System Clear on page 102.
- If the Half System Clear did not work, perform a Partial Reset. See Partial Reset on page 102.
- As a last resort, perform a Full System Clear procedure. See Full System Clear on page 103.
2 If needed, contact the Royal Customer Support hotline at 1-800-272-6229 for additional assistance.


## Opening the Drawer When There is no Power

If there is no power and you need to open the drawer, make sure the drawer is unlocked by using the 515 Drawer key.

1 With your hands on the cash drawer, carefully tip the front of the register up. Underneath the cash register, toward the back of the register, you see a small lever.
2 Push the lever in the only direction it will move. The cash
 drawer opens.

## Half System Clear

If you cannot get the cash register to respond, try a half system clear.
To do a half system clear
1 Turn the Mode key to the OFF position.
2 Unplug the cash register from the power source.
3 Wait 30 seconds.
4 Plug the cash register in again.
5 Continue with normal operations.

## Partial Reset

If the cash register did not respond to the Half System Clear, try a Partial Reset. This procedure requires both your hands or a friend to help.

To do a partial reset
1 Turn the Mode key to the OFF position.
2 Unplug the cash register from the power source.
3 Using the round Number keys, press and hold the 3 key and the 7 key at the same time. Continue to hold these keys down.
4 While you still hold down the 3 and 7 keys. plug the cash register back into the power source.
5 Release the 3 and 7 keys.
6 Continue with normal operations.

## Full System Clear

If nothing else works, perform the following procedure.

## Caution

This procedure resets the cash register to the factory settings. You lose all your transaction information and programming information.

To do a full system clear
1 Turn the Mode key to the OFF position.
2 Remove one back-up battery.
3 Unplug the cash register from the power source and wait 5 minutes.
4 Plug in the cash register.
5 Replace the battery.


6 Reprogram the cash register.
7 Continue with normal operations.

## If Nothing Helps

If a problem still persists, call our Customer Service Support Line toll-free at 1-800-272-6229.

## Examples

The examples in this section show how to ring up different types of transactions. A maximum of 7 digits may be used to enter a price.

## Reminder

If Clerk Numbers are programmed, be sure to type the CLERK \#, then press the CLERK key, the password and the CHECK key, if programmed, before ringing up a sale.

To ring up a sale
V Put the REG key in the Mode key slot and turn it to the REG1 position. You are ready to ring up sales.

## Important

You do not need to press the Decimal Point when ringing up a price.
The following examples are in this chapter.

- Adding Tax to a Non-Taxable Department
- Cash Sale With Tendering Change
- Cash Sale Without Tendering Change
- Charge Sale
- Charge Return
- Coupon Discount Sale
- Credit Return
- Credit Sale
- Dept Shift Key
- Exempting Tax On An Item
- Exempting Tax on the Entire Sale
- Gallonage Sales Transaction
- Minus Percentage Discount Sale
- Multiplication of a Department Unit Price
- Multiplication Sale
- Multiplying By A Fraction
- No-Sale Function
- Overriding a PLU Sale
- Paid-Out Sale
- PLU Sale
- PLU Sale With PLU Description
- Plus Percentage Sale
- Received-On-Account Sale
- Registering A Department Unit Price
- Registering A Reference Number
- Return Sale
- Split Tendering Sale
- Temporarily Overriding a PLU Price
- Use the Error-Correct /Void Key
- Voiding A Coupon Sale
- Voiding a Department Preset Price
- Voiding a Department Preset with a Coupon Discount
- Voiding a Department Preset with a Minus Percentage Discount
- Voiding A Minus Percentage Discount Sale
- Voiding a Multiplication of a Department Preset Price
- Voiding A Multiplication Sale
- Voiding a PLU Multiplication Sale
- Voiding a PLU Sale
- Voiding a PLU Sale with a Coupon Discount
- Voiding a Plu Sale with a Minus Percentage Discount
- Voiding a PLU Sale with a Plus Percentage Rate
- Voiding a Plus Percentage Sale
- Voiding A Sale


## Sample Receipt

The example below shows the general transaction information you see printed on a receipt.


## Transaction Codes

The following codes appear on transaction receipts:
Table 22 Transaction Codes

| The code... | Means this... |
| :--- | :--- |
| $\#$ | Reference Number |
| @ | Amount Being Multiplied |
| AMOUNT | Amount of Cash Tendered |
| ADD ON | Plus Percent |
| CASH | Cash Transaction Total |
| CHANGE | Change |
| CHARGE | Charge Transaction Total |
| CHECK | Check Transaction Total |
| Clerk \# 1 to | Clerk number 1 to number n where n= the maximum |
| Clerk \#n | number of clerks |
| COUPON | Coupon |
| CREDIT | Credit card transaction |

Table 22 Transaction Codes (Continued)
The code... Means this...

| DISCOUNT | Minus Percent Discount |
| :--- | :--- |
| DUPLICATE <br> RECEIPT | After a transaction, you can print a duplicate receipt <br> by pressing the Subtotal w/Tax key immediately after <br> the original receipt has finished printing and before <br> another transaction is started |
| NO SALE | No-Sale Function or Open Cash Drawer |
| PAID OUT | Paid Out |
| *PRICE* | Overriding of a PLU Price |
| RECD ACCT | Received on Account |
| REFUND | Return (Refund) |
| SUBTTL | Subtotal (Excludes Tax) |
| T1 | Tax 1 Rate Applied to a Sale |
| T2 | Tax 2 Rate Applied to a Sale |
| T3 Rate Applied to a Sale |  |
| T4 | Tax 4 Rate Applied to a Sale |
| TOTAL | Total of Sale |
| TX | Represents Tax Total if Option 1 is selected on Flag <br> $24 . ~ F o r ~ m o r e ~ i n f o r m a t i o n, ~ s e e ~ P r o g r a m m i n g ~ F l a g ~$ |
| Options on page 65 |  |

The rest of this chapter shows you example transactions.


## Reminder

Put the REG key in the Mode key slot and turn it to the REG1 position. You are ready to ring up sales.

## Adding Tax to a Non-Taxable Department

Example 26: Assume the Department 2 key is programmed for no tax and the
TAX 1 rate is programmed for 6\%. Ring up a $\$ 1.00$ item in Department 2, charging the $6 \%$ tax rate.

To add tax to a non-taxable department
1 Press the ${ }^{\operatorname{tax} 1}$ key.
2 In the Number keys area, press 100, and then press the $\underbrace{22^{2}}_{2}{ }^{8}$ key.

3 Press the

```
amount tend
key.
```


## Cash Sale With Tendering Change

Example 27: Ring up a $\$ 1.00$ item in Department 1 and compute change from \$5.00 cash tendered.

To ring up a sale with tendering change
1 In the Number keys area, press 100, and then press the


2 Press the $\left.\begin{array}{c}\# / \text { st/ } \\ \text { ns }\end{array}\right)$ key.
You do not need to press the Subtotal key if you do not want the subtotal of a sale to print.

3 Press the


4 In the Number keys area, press 500, and then press the


## Cash Sale Without Tendering Change

Example 28: Ring up a $\$ 1.00$ item in Department 1.
To ring up a sale without tendering change
1 In the Number keys area, press 100, and then press the
2 Press the $\left.\begin{array}{c}\# / 5 \mathrm{st} / \\ \mathrm{ns}\end{array}\right)$ key.
You do not need to press the Subtotal key if you do not want the subtotal of a sale to print.

3 Press the


4 Press the


## Charge Sale

Example 29: Ring up a $\$ 1.00$ item in Department 1 and finalize the sale with the charge key.

To ring a charge sale
1 In the Number keys area, press 100, and then press the $\int_{\left.\frac{1}{1} \frac{A}{21}\right]}^{l}$ key.
2 Press the charge key.
You do not have to enter any amounts before pressing the charge key.

## Charge Return

Example 30: Refund $\$ 1.00$ in Department 1 and credit the return to charge.
To ring a charge return
1 Press the return key.
2 In the Number keys area, press 100, and then press the $\left(\begin{array}{ll}1 & A \\ 21 & U\end{array}\right)$.
3 Press the charge key.

## Coupon Discount Sale

Example 31: There are various versions of ringing up a Coupon Discount sale. Based on the option selected for the Tax Status Number, select the example below that best serves your needs.

## Version 1a

In the following example, the tax status number for the Coupon key is programmed for the option 00. If no tax is programmed in your cash register, ring up $\$ 1.00$ item in Department 2 and then deduct the $20 \phi$ coupon.

To ring a coupon discount sale
1 In the Number keys area, press 100 and then press the $\frac{2}{22 \mathrm{v}}$ key.
2 In the Number keys area, press 20 and then press the $\mathrm{cpn}^{\text {key }}$.
3 Press the $\underbrace{\text { key. }}_{\substack{\text { amount tend } \\ \text { total }}}$
Version 1b
If you want to charge the tax rate on the original amount of an item, before the coupon is deducted, ring up a $\$ 1.00$ item in Department 1 and then deduct the 20 ¢ coupon.

To ring a coupon discount sale
1 In the Number keys area, press 100 and then press the $\overbrace{\frac{1}{1}}^{21} 4]$ key.
2 In the Number keys area, press 20 and then press the $\mathrm{cpn}^{\text {key. }}$
3 Press the $\underset{\substack{\text { amount tend } \\ \text { total }}}{ }$ key.

## Version 2

In the following example, the TAX STATUS NUMBER for the Coupon key is programmed for the option 01.

To ring a coupon discount sale
1 In the Number keys area, press 100 and then press the $\begin{array}{ll}1 & \text { A } \\ 21 & U\end{array}$ key.
2 In the Number keys area, press 20 and then press the cpn key.
3 Press the ${\underset{c}{\text { amount tend }} \text { total }}$ key.

## Credit Return

Example 32: Refund $\$ 1.00$ in Department 1 and credit to a credit key.

## Note

Dept. 19 and/or Dept. 20 keys must be programmed as Credit keys and Flag \# 16 correctly set for this example to work. See Programming the Credit Keys on page 55.

To ring a credit return
1 Press the return key.
2 In the Number keys area, press 100 and then press the $\left[\begin{array}{ll}1 & \text { A } \\ 21 & U\end{array}\right)$ key. 3 Press the $\begin{aligned} & 19 \mathrm{~S} \\ & 39\end{aligned}$ or the $\begin{aligned} & 20 \mathrm{~T} \\ & 40\end{aligned}$ key.

It is not necessary to enter any amount before pressing either of the credit keys.

## Credit Sale

Example 33: Ring up a $\$ 1.00$ item in Department 1 and $\$ 2.00$ in Department 2 and finalize the sale with the CREDIT key.

## Note

Dept. 19 and/or Dept. 20 keys must be programmed as Credit keys and Flag \# 16 correctly set for this example to work. See Programming the Credit Keys on page 55.

To ring a credit sale
1 In the Number keys area, press 100, and then press the 21 key.

2 In the Number keys area, press 200, and then press the $\begin{aligned} & 2 \quad \mathrm{~B} \\ & 22\end{aligned}$ key.
3 Press the $\begin{aligned} & 19 \mathrm{~S} \\ & 39\end{aligned}$ or the $\begin{aligned} & 20 \mathrm{~T} \\ & 40\end{aligned}$ key.
It is not necessary to enter any amount before pressing either of the credit keys.

## Dept Shift Key

Example 34: Ring up a $\$ 1.00$ item in Department 1 (taxable), $\$ 2.00$ in Department 21 (non-taxable) and $\$ 3.00$ in Department 1 and compute change from $\$ 10.00$ cash tendered.

To ring a sale using the Dept Shift key
1 In the Number keys area, press 100, and then press the $\frac{1}{21}{ }_{2}^{\mathrm{A}}$ key.
2 In the Number keys area, press 200, then press the $\begin{aligned} & \text { dept } \\ & \text { shift }\end{aligned}$ key, and then press the $\begin{array}{ll}1 & A \\ 21 & U\end{array}$ key.
3 In the Number keys area, press 300, and then press the


4 Press the $\left[\begin{array}{c}\text { subtotal } \\ \text { w/tax }\end{array}\right)$ key.
5 In the Number keys area, press 1000 , and then press the
amount tend total key.

## Note

The register returns to the Non-Shift Mode after each department entry.

## Exempting Tax On An Item

Example 35: Assume the Department 1 key is programmed as a taxable department. Ring up a $\$ 1.00$ item in Department 1 without charging tax.

To ring an item without charging tax
1 Press the $\begin{gathered}\text { non } \\ \text { tax }\end{gathered}$ key.
2 In the Number keys area, press 100, and then press the $\int_{21}^{1}$ A key.
3 Press the $\underset{\substack{\text { amount tend } \\ \text { total }}}{ }$ key.

## Exempting Tax on the Entire Sale

Example 36: Assume the Department 1 key is programmed as a taxable department. Ring up a $\$ 1.00$ item and a $\$ 1.50$ item in Department 1 without charging tax.

To ring an entire sale without charging tax
1 In the Number keys area, press 100, and then press the 21 U key.

2 In the Number keys area press 150, and then press the | 1 | $A$ |
| :--- | :--- |
| 21 |  |

3 Press the $\begin{gathered}\text { non } \\ \text { tax }\end{gathered}$ key.
4 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Gallonage Sales Transaction

Example 37: In this example, Department 4 is programmed for Gallonage Mode and is non-taxable. Ring 10.759 gallons at $\$ 1.149$ per gallon.

To ring a gallonage sales transaction
1 In the Number keys area, press 10.579 , and then press the $\begin{aligned} & \text { qtyl } \\ & \text { date }\end{aligned}$ key.
2 In the Number keys area, press 1149, then press the $\left[\begin{array}{ll}4 & D \\ 24 & x\end{array}\right]$ key.
3 Press the ${\underset{c}{\text { amount tend }} \text { total }}^{\text {key. }}$

## Minus Percentage Discount Sale

Example 38: The following are two versions of Minus Percentage Discount Sales.

## Version 1

## Note

If no tax is programmed in your cash register, ring up a $\$ 1.00$ item in Department 2 and apply a pre-programmed discount rate of $10 \%$.

To ring a minus percentage discount sale
1 In the Number keys area, press 100, and then press the


2 Press the $\begin{aligned} & -\% \\ & R A\end{aligned}$ key.

## Note

If the Minus Percentage Discount Rate is NOT programmed, type in the discount rate before pressing the

3 Press the

| amount tend |
| :---: |
| total | key .

## Version 2

Note
When ringing a taxable item with a percentage discount, tax will automatically be charged on the discounted amount, the amount after the percentage discount is deducted.

To ring a minus percentage discount sale
1 In the Number keys area, press 100, and then press the


2 Press the $\begin{aligned} & -\% \\ & R A\end{aligned}$ key.

## Note

If the Minus Percentage Discount Rata is NOT programmed, type in the discount rate before pressing the $-\%$
$R A$

3 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Multiplication of a Department Unit Price

Example 39: Assume the Department 1 key is pre-programmed for $\$ 1.00$. Ring up this price three times.

To multiply a department unit price
1 In the Number keys area, press 3, and then press the $\left[\begin{array}{c}\text { qtyl } \\ \text { date }\end{array}\right]$ key.
2 Press the $\frac{1}{l^{A}} \begin{array}{ll}21 & U\end{array}$ key.
3 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Note

You can up to 32 prices by using the 32 Department keys for quick ring-ups.

## Multiplication Sale <br> Example 40: Ring up three $\$ 1.00$ items in Department 1.

To ring a multiplication sale
1 In the Number keys area, press 3, and then press the
2 In the Number keys area, press 100, and then press the $\frac{{ }^{1} \text { A }}{21}$ key.
date key.

3 Press the $\underset{\substack{\text { amount tend } \\ \text { total }}}{ }$ key.
Note
You can use from . 001 to 999.999 when ringing up the quantity of an item.

## Multiplying By A Fraction

Example 41: Multiply the quantity of 1.25 , as in $1 \frac{1}{4}$ yards of fabric at $\$ 1.00$ per yard in Department 1.

## Caution

When multiplying by a fraction, you must use the decimal point in the fraction but not in the dollar amount.

To multiply an item by a fraction
1 In the Number keys area, press 1.25, and then press the

2 In the Number keys area, press 100, and then press the $\underbrace{21}_{\frac{1}{21} \quad \text { A }}$ key.
3 Press the
amount tend key.
total
Note
You can use from .001 to 999.999 when ringing up the quantity of an item.

## No-Sale Function

Example 42: Used to open the drawer without ringing up a sale. For example, to give change.

To use the No Sale function

Press the | $\begin{array}{c}\# \text { sts/ } \\ \text { ns }\end{array}$ |
| :---: | key. The cash register drawer opens.

## Note

The number of times the No-Sale key is used appears on the Management Reports. For more information about these reports, see Running Management Reports on page 83.

## Overriding a PLU Sale

Example 43: If you need to enter a different price than what is programmed into a PLU \#: Enter the price 100, press the PLU ALT key, enter the PLU \#, then press the PLU key. The word *PRICE* appears above the PLU description or PLU number.

To override a PLU sale
1 In the Number keys area, press 100, press the
 key.

2 In the Number keys area, enter the PLU number, and then press the

3 Press the amount tend The word *PRICE* appears above the description or PLU \#.

## Paid-Out Sale

Example 44: Indicates money taken out of the cash drawer. Ring up $\$ 10.00$ to show money paid out of the cash drawer.

To record monies paid out

$\boldsymbol{\nabla}$ In the Number keys area, press 1000 , then press the | $+\%$ |
| :---: |
| PO | key.

## PLU Sale

Example 45: Assume the PLU \# is preset for the price of $\$ 1.99$ in Department 1. Ring up the PLU \#1.

To ring a PLU sale
1 In the Number keys area, press 1, and then press the
 key.
2 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Note

PLUs follow the same procedure for ringing up Coupons, Refunds, Minus Percentage Discounts, Plus Percentages, and so on.

## PLU Sale With PLU Description

Example 46: PLU \#1 has been programmed with the description "APPLE".
To ring a PLU sale with a PLU description
1 In the Number keys area, press 1, and then press the
2 Press the $\underset{\substack{\text { amount tend } \\ \text { total }}}{ }$ key.

## Plus Percentage Sale

Example 47: The following are two versions of the Plus Percentage Sale.

## Version 1

## Note

If no tax is programmed in your cash register, ring up a $\$ 1.00$ item in Department 2 and apply a pre-programmed Plus Percentage Rate of 10\%.

To ring a PLU percentage sale
1 In the Number keys area, press 100, and then press the $\int_{2}^{2} \quad \begin{aligned} & \text { B }\end{aligned}$ key.
2 Press the $\begin{aligned} & +\% \\ & \mathrm{PO}\end{aligned}$ key.

## Note

If the Plus Percentage Rate is NOT pre-programmed, type in the PLUs percentage rate before pressing the
$+\%$ PO

3 Press the
amount tend total

## Version 2

## Note

When ringing a taxable item with a Plus Percentage the tax will automatically be charged on the amount after the PLUs percentage is added.

To ring a PLUs percentage sale
1 In the Number keys area, press 100, and then press the $\int_{\frac{1}{21} \mathrm{~A}}^{21}$ key.
2 Press the $\begin{gathered}+\% \\ \mathrm{PO}\end{gathered}$ key.

## Note

If the Plus Percentage Rate is not pre-programmed, type in the Plus
Percentage Rate before pressing the

key.
3 Press the amount tend key.

## Received-On-Account Sale

Example 48: Indicates money put in the cash drawer. Ring up $\$ 50.00$ to show the beginning cash-in-drawer amount for the day.

To receive monies on account
$\boldsymbol{\nabla}$ In the Number keys area, press 5000 , and then press the $\begin{aligned} & -\% \\ & R A\end{aligned}$ key.

## Registering A Department Unit Price

Example 49: Assume Department 1 is pre-programmed for $\$ 1.00$. Ring up this price.

To register a department unit price
1 Press the $\begin{array}{ll}1 & A \\ 21 & U\end{array}$ key.
2 Press the

key.
Note
You can up to 32 prices by using the total of the 32 Department keys for quick ring-ups.

## Registering A Reference Number

Example 50: Used to print a number, up to 10 digits, to identify an invoice number, credit card number or any other number on receipts. Ring up the number 1234567 in a standard sale.

## Note

Using the reference number is not recorded in any activity counter or sales totals on the Management Reports.

To register a reference number
1 In the Number keys area, enter the Reference Number up to 10 digits, and then press the $\left[\begin{array}{c}\# \text { sst/ } \\ \mathrm{ns}\end{array}\right)$ key.
2 In the Number keys area, press 100 , and then press the $\int_{\frac{1}{21} \mathrm{~A}^{\mathrm{A}}}^{2}$ key.
3 Press the
$\underset{\text { total }}{\operatorname{amount}}$ key.

## Return Sale

Example 51: Refund a $\$ 1.00$ item in Department 1 and refund a $\$ 1.50$ item three times in Department 1.

To ring a return sale
1 Press the return key.
2 In the Number keys area, press 100, and then press the $\begin{array}{ll}1 & A \\ 21 & \text { dey }\end{array}$
3 Press the return key.
4 In the Number keys area, press 3, and then press the $\begin{gathered}\text { quty } \\ \text { date }\end{gathered}$ key.
5 In the Number keys area, press 150, and then press the $\int_{\frac{1}{21}}^{21}$ key.
6 Press the $\underbrace{\text { key. }}_{\substack{\text { amount tend } \\ \text { total }}}$

## Note

The Return function can be performed in the middle of any sales transactions or by itself in a separate transaction

## Split Tendering Sale

Example 52: Ring up a $\$ 15.00$ item in Department 1, split the total of the sale between $\$ 5.00$ in cash payment and $\$ 10.90$ in charge payment.

To ring up a Split Tendering sale
1 In the Number keys area, press 1500, and then press the $\underbrace{1}_{21}$ A key.
2 Press the $\left.\begin{array}{c}\text { subtotal } \\ \text { w/tax }\end{array}\right)$ key.
3 In the Number keys area, press 500, and then press the
amount tend total
key.
4 Press the charge key.

## Note

When using the Split Tendering function, the amount in cash must always be entered first. The sale can also be finalized with the Check key. Substitute the check $^{\text {key in Step } 4 \text { of the example above. }}$

## Temporarily Overriding a PLU Price

Example 53: If you want to enter a different price than what is programmed into a PLU number.

To override a PLU price
1 In the Number keys area, type the price you want, press the $\begin{aligned} & \text { plu } \\ & \text { alt }\end{aligned}$ key.
2 In the Number keys area, type the PLU number and then press the


The word *PRICE* appears above the PLU description to indicate the overriding of a PLU price.

## Use the Error-Correct /Void Key

Example 54: Corrects the last entry run up during a sale. Ring up a $\$ 1.00$ item in Department 1, then use the [VOID] key to cancel this entry and ring up a $\$ 10.00$ in Department 1 to register a new entry.

To use the error-correct/void key

2 Press the void key.
1 In the Number keys area, press 1000, and then press the


2 Press the


## Voiding A Coupon Sale

Example 55: Void a $\$ 1.00$ item in Department 1, void a 20¢ coupon.
To void a coupon sale
1 In the Number keys area, press 100, press the the $\begin{array}{ll}1 & A \\ 21 & \mathrm{U}\end{array} \mathrm{key}$.
1 In the Number keys area, press 20, press the void key, and then press the cpn key.
2 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Voiding a Department Preset Price

Example 56: Assume Department 1 is programmed for the price of $\$ 1.00$ and Department 2 is programmed for the price of $\$ 2.00$. Ring up Department 1 and Department 2 prices, then void the Department 1 entry.

To void a department preset price
1 Press the $\frac{1}{\frac{A}{21}}$ key.
2 Press the $\left(\begin{array}{ll}2 & B \\ 22 & \text { b }\end{array}\right)$ key.
3 Press the clear key.
4 Press the void key and then press the $\begin{array}{ll}\frac{1}{21} & \mathrm{~A} \\ 21 & \mathrm{U}\end{array}$ ke.y
5 Press the ${\underset{c}{\text { amount tend }} \text { total }}^{\text {key. }}$

## Voiding a Department Preset with a Coupon Discount

Example 57: Assume Department 1 is programmed for $\$ 1.00$ and Department 2 is programmed for $\$ 2.00$. Ring up Department 1 and deduct 20 $¢$, ring up
Department 2 and deduct 20¢, then void the Department 1 entry with the 20¢ coupon discount.

To void a department preset with a coupon discount
1 Press the $\begin{array}{ll}\begin{array}{l}1 \\ 21\end{array} \\ 21 & \text { key. }\end{array}$
2 In the Number keys area, press 20, and then press the
 key.
3 Press the $\frac{{ }^{2} \quad \frac{B}{22}}{22}$ key.

4 In the Number keys area, press 20, and then press the cpn key.
5 Press the clear key.
6 Press the void key and then press the $\frac{1}{1} \frac{A}{21}$ key.
7 In the Number keys area, press 20, press the void key, and then press the cpn key.
8 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Voiding a Department Preset with a Minus Percentage Discount

Example 58: Assume Department 1 is programmed for $\$ 1.00$, Department 2 is programmed for $\$ 2.00$, and the $[-\% / \mathrm{RA}]$ key is pre-programmed for $10 \%$. Ring up Department 1 and deduct 10\%, ring up Department 2 and deduct $10 \%$, then void the Department 1 entry with the $10 \%$ discount.

To void a department preset with a minus percentage discount
1 Press the $\begin{array}{ll}1 & A \\ 21 & d\end{array}$ key and then press the $\begin{array}{ll}-\% \\ R A\end{array}$ key.
2 Press the $\begin{array}{lll}2 & B \\ 22 & v\end{array}$ key and then press the $\begin{array}{ll}-\% \\ R A\end{array}$ key.
3 Press the clear key.
4 Press the void key, press the $\begin{array}{ll}1 & A \\ 21 & U\end{array}$ key, and then press the $\begin{aligned} & -\% \\ & R A\end{aligned}$ key.

## Note

If the Minus Percentage Discount Rate is not pre-programmed, type in the discount rate before pressing the

## Voiding A Minus Percentage Discount Sale

Example 59: Void a $\$ 1.00$ item in Department 1 and void a pre-programmed Minus Percentage Discount Rate of 10\%.

To void a minus percentage discount sale
1 In the Number keys area, press 100, press the void key, and then press the $\begin{array}{ll}1 & A \\ 21 & \mathrm{~A}\end{array} \mathrm{key}$.

2 Press the $\begin{aligned} & -\% \text { key. } \\ & R A\end{aligned}$

## Note

If the Minus Percentage Discount Rate is NOT pre-programmed, type in the discount rate before pressing the $[-\% / R A]$ key.

3 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Voiding a Multiplication of a Department Preset Price

Example 60: Assume Department 1 is programmed for the price of $\$ 1.00$ and Department 2 is programmed for the price of $\$ 2.00$. Ring up Department 1 three times and Department 2 two times, then void the Department 1 entry rung up three times.

To void a multiplication of a department preset price
1 In the Number keys area, press 3, and then press the


2 Press the $\underbrace{21}_{\substack{1 \\ 21}}$ key.
3 In the Number keys area, press 2, and then press the
4 Press the $\sum_{22 \quad \mathrm{~b}}^{22}$ key.
5 Press the clear key.
6 Press the void key.
7 In the Number keys area, press 3, and then press the quyl
date key.
8 Press the $\begin{aligned} & 1 \text { A } \\ & 21 \quad \text { en }\end{aligned}$ key.
9 Press the ${\underset{c}{\text { amount tend }} \text { total }}^{\text {key. }}$

## Voiding A Multiplication Sale

Example 61: Void a $\$ 1.00$ item in Department 1 three times.
To void a multiplication sale
1 In the Number keys area, press 3 and then press the $\left.\begin{array}{c}\text { atyl } \\ \text { date }\end{array}\right)$ key.

2 In the Number keys area, press 100, press the void key, and then press the $\begin{array}{ll}1 & A \\ 21 & U\end{array}$ key.

## Voiding a PLU Multiplication Sale

Example 62: Assume PLU \#1 is preset for the price of $\$ 1.00$ in Department 1.
Void PLU \#1 three times.
To void a PLU multiplication sale
1 In the Number keys area, press 3, press the $\begin{aligned} & \text { atyl } \\ & \text { date }\end{aligned}$ key.
2 In the Number keys area, press 1, press the void key, and then press the plu key.
3 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Voiding a PLU Sale

Example 63: Assume PLU \#1 is preset for the price of $\$ 1.00$ in Department 1. Void PLU \#1.

To void a PLU sale
1 In the Number keys area, press 1, press the void key, and then press the plu key.
2 Press the $\underbrace{}_{\substack{\text { amount tend } \\ \text { total }}}$ key.

## Voiding a PLU Sale with a Coupon Discount

Example 64: Assume PLU \#1 is preset for the price of $\$ 1.00$ in Department 1 and deduct a $20 ¢$ coupon. Void this entry.

To void a PLU sale with a coupon discount
1 In the Number keys area, press 1, press the void key, and then press the plu key.
2 In the Number keys area, press 20, press the void key, and then press the $\qquad$
3 Press the $\underbrace{\begin{array}{c}\text { amount tend } \\ \text { total }\end{array}}$ key.

## Voiding a Plu Sale with a Minus Percentage Discount

Example 65: Assume PLU \#1 is preset for the price of $\$ 1.00$ in Department 1 and the $\underset{\substack{-\% \\ R A}}{ }$ key is pre-programmed for 10\%. Ring up PLU \#1, deduct 10\%, then void this entry.

To void a PLU sale with a minus percentage discount
1 In the Number keys area, press 1, press the the plu key.
2 Press the $\begin{aligned} & -\% \text { key. } \\ & R A\end{aligned}$
If the Minus Percentage Discount is not pre-programmed, type the discount rate before pressing the $\begin{aligned} & -\% \\ & R A\end{aligned}$ key.
3 Press the $\underbrace{\text { key. }}_{\substack{\text { amount tend } \\ \text { total }}}$

## Voiding a PLU Sale with a Plus Percentage Rate

Example 66: Assume PLU \#1 is preset for the price of $\$ 1.00$ in Department 1 and the [+\%/PO] key is pre-programmed for $10 \%$. Ring up PLU \#1, add 10\%, then void this entry.

To void a PLU sale with a PLUs percentage rate
1 In the Number keys area, press 1, press the the plu key.

2 Press the | $+\begin{array}{c}+\% \\ \mathrm{PO}\end{array}$ |
| :---: |
| key. |
| ker |

If the Plus Percentage Rate is not pre-programmed, type in the discount rate before pressing the

3 Press the

key.

## Voiding a Plus Percentage Sale

Example 67: Void a $\$ 1.00$ item in Department 1 and void a pre-programmed Plus Percentage Rate of $10 \%$.

To void a PLUs percentage sale
1 In the Number keys area, press 100, press the void key, and then press the $\begin{array}{ll}1 & A \\ 21 & \mathrm{~A}\end{array} \mathrm{key}$.

2 Press the $\left[\begin{array}{c}+\% \\ \text { PO }\end{array}\right)$ key.
Note
If the Plus Percentage rate is NOT pre-programmed, type in the Plus
Percentage Rate before pressing the +\%/PO key.
3 Press the
amount tend
key.

## Voiding A Sale

Example 68: Void a $\$ 1.00$ item in Department 1.
To void a sale
1 In the Number keys area, press 100, press the void key and then press the $\begin{array}{ll}1 & A \\ 21 & \mathrm{~A}\end{array} \mathrm{key}$.
2 Press the
amount tend
key.

## Calculating State Tax Table Codes

This appendix shows you how to program your cash register for state tax.
The State Tax Code represents a series of codes which are derived from your State's Retail Tax Chart to give you the highest level of accuracy in charging sales and other taxes.

## Calculating Your Tax

This section gives you instructions for figuring your own tax code if your specific state's tax code is not listed in the appendix. Take the time to follow the Example Tax Chart on page 129. Familiarize yourself with the method of determining the tax code.

Then, using The Worksheet on page 130, duplicate the method of calculating your state tax code by the steps described in this section. To do this you need to get a copy of your state's Retail Tax Chart from your local Tax Office. After you are done, write down the tax code and save the information for future reference.

Every tax table consists of tax brackets. Each consecutive tax bracket is assigned a tax which is exactly one cent higher than that assigned to the previous tax bracket. For examples, see Example Tax Chart on page 129.
In our Example Tax Chart, a sale from .00 to .12 is not taxed. The next tax bracket a sale from .13 to .31 is taxed one cent. The next tax bracket a sale from .32 to .54 is taxed two cents. The tax table progresses in a similar pattern.

## To calculate your tax rate

1 Using The Worksheet on page 130, complete Step A with the appropriate amounts from your state's Retail Tax Chart.

2 For the following, see the Example Tax Chart, Step B:
The difference between the starting amounts of each consecutive tax bracket is called a breakpoint. Every tax table consists of a particular sequence of breakpoints.

In our Example Tax Chart, the difference between .00 and .13 is .13 cents. This 13 is the first breakpoint. The difference between .13 and .32 is .19 cents, which means 19 is the second breakpoint.
The breakpoints continue in a particular sequence through the entire tax table. It is this particular sequence of breakpoints that is used to determine the programming code.

- Using The Worksheet, complete Step B by calculating the breakpoints based on your state's Retail Tax Chart.
- The sequence of breakpoints is divided into Regular and Irregular patterns. All tax tables repeat a pattern of irregular breakpoints that lead into a pattern of regular breakpoints.

To determine the breakpoint pattern, continue calculating the breakpoints in Part B until you have found the Regular repeat breakpoint pattern.
From our example:
Breakpoints 13, 19, 23, 27, 27, 29 are the Irregular breakpoint pattern.
Breakpoints 25, 25, 25, 25 are the Regular repeat breakpoint pattern.
The Regular repeat breakpoint pattern is a point where you first see a repetition of one or more numbers, which must then add up evenly to $100,200,300$, and so on. In our programming example, the Regular breakpoint pattern $(25,25,25$, and 25$)$ adds up to 100 .
Using The Worksheet, determine the Regular breakpoint pattern based on your state's Retail Tax Chart.
3 For the following, see the Example Tax Chart, Step C:
The first number to be programmed consists of the Base Tax followed by the number 1. In PRG position, type your Base Tax number, followed by the number 1, then press the Tax 2 key.

- The Base Tax - A base tax is defined by local or state government and refers to the minimum point where no tax is charged. If no tax is charged from .0 cents to .12 cents, then .12 cents is your base tax.
- The Number 1 - The programming mode for a tax table is 1 . When programming any tax table code this number does not change.
For example: If the base tax is . 12 cents: Type 121, then press Tax 2. The display shows 1.21 .

Using The Worksheet, complete Step A.
4 For the following, see the Example Tax Chart, Step D:
The second number to be programmed is a six digit number. Follow the instructions and examples below to determine your six digit number. In PRG position, type the six digit number and then press the Tax 2 key.
Example: 4\% State Tax Table:
(2) $100 \quad$ (1) $4 \quad 4 \%$ Tax Table Rate

$$
\frac{\mathrm{x} 24}{2400}
$$

x 24
96 $\begin{aligned} & \text { Multiplier } \\ & \text { Result: The }\end{aligned}$ programmed is 240096

- (1) First determine the multiplier ${ }^{1}$. The multiplier is the number which when multiplied by the percentage rate equals a whole number as close as possible to the number 100 and still remaining a 2 digit number. In the example above, the multiplier is 24 . The number 4 (the percentage rate) is multiplied by 24 to determine the number 96 which is the last two digits of the 6 digit number to be programmed: $(24 \times 4=96)$.
- (2) The first four digits of the 6 digit number (2400) are determined by multiplying the number 24 by $100(24 \times 100=2400)$. The final resulting 6 digit number to be programmed is 240096.
Using The Worksheet, complete Step D.
5 For the following, see the Example Tax Chart, Step E:
- In PRG position, type the individual breakpoints of the Irregular breakpoint pattern and press the Tax 2 key after each breakpoint. Place the number 10 before the last breakpoint entry.
Table 23 Example: Irregular breakpoint sequence: 13, 19, 23, 27, 27, 1029

| Type... | Press... | Appears as... |
| :--- | :--- | :--- |
| 13 | Tax 2 | 0.13 |
| 19 | Tax 2 | 0.19 |
| 23 | Tax 2 | 0.23 |
| 27 | Tax 2 | 0.27 |
| 27 | Tax 2 | 0.27 |
| 1029 | Tax 2 | 10.29 |

Using The Worksheet, complete Step E.
6 For the following, see the Example Tax Chart, Step F:

1. The easiest way to determine the multiplier is to divide the number 100 by the percentage rate until the result is a whole number as close to 100 as possible and still remaining a 2 digit number.

In PRG position, type the individual breakpoints of the Regular breakpoint pattern and press the Tax 2 key after each breakpoint. Place the number 10 before the last breakpoint entry.
Table 24 Example: Regular breakpoint sequence 25, 25, 25, 1025

| Type... | Press... | Appears as... |
| :--- | :--- | :--- |
| 25 | Tax $\mathbf{2}$ | 0.25 |
| 25 | Tax 2 | 0.25 |
| 25 | Tax $\mathbf{2}$ | 0.25 |
| 1025 | Tax 2 | 10.25 |

Using The Worksheet, complete Step F.
7 For the following, see the Example Tax Chart, Step G:
To summarize the steps taken in calculating and programming the State
Tax Table Code, combine Steps A through F and maintain for future reference.

## Note

Programming the State Tax Table Code is done with the Mode key in the PRG position.

121, Tax 2, 240096 , Tax 2, 13, Tax 2, 19, Tax 2, 23, Tax 2, 23, Tax 2,
27, Tax 2, 27, Tax 2, 1029, Tax 2, 25, Tax 2, 25, Tax 2, 25, Tax 2, 1025,
Tax 2.
Using The Worksheet, complete Step G by using the method described.

## Example Tax Chart

The following is an example of how a tax chart can look.
Note
A total of 63 breakpoints can be programmed on this cash register.

STEP C: Enter the base tax amount (the minimum point where no tax is charged) followed by the Number " 1 ". Then press the TAX 2 key.

STEP D: Enter the 6
digit number
(i.e. $48=240096$ ).

STEP E: Enter the
individual Irregular
breakpoint pattern.
Press the Tax 2 key
after each breakpoint.
Place the number 10
before the last Irregular breakpoint.
(13, 19, 23, 27, 27, 1029)
STEP F: Enter the individual breakpoints of the "Regular" breakpoint pattern. Press the TAX 2 key after each breakpoint. Place the number " 10 " before the last Regular breakpoint. (25, 25, 25, 1025)

STEP G: To summarize, combine the Steps A through $F$ and keep the information for future use.

```
121 TAX 2
240096 TAX 2
13 TAX 2
19 TAX 2
23 TAX 2
27 TAX 2
27 TAX 2
1029 TAX 2
25 TAX 2
25 TAX 2
25 TAX 2
1025 TAX 2
```


## The Worksheet

Write down your results as you go.

STEP C:

STEP D:

STEP E:

STEP F:

STEP G:


## Programming the State Tax

You need to get a copy of your state's Retail Tax Chart so you can know the base tax amount. The base tax amount is the maximum price where no tax is charged. For example, if no tax is charged from 0 cents to 10 cents, then 10 cents is the base tax amount.

After you find out your state's tax rate, you can program it into your cash register.

## Note

If you make a mistake or you hear an error beep while you are programming the sales tax, press Clear and start over with Step 3.

To program a single fixed tax rate using a base tax amount
Example 69: If the Base Tax Amount is 10 cents and the Tax Rate is 6\%:
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 If you are prompted for a Manager Password, type the password number and then press the Check key. If you did not program a Manager Password, go to the next step.

3 In the round Number keys area, press 1 and then press the Tax 1 key.
4 Press 104 and then press the Tax 2 key.
5 Press 6000 and press the Tax 2 key.

## Programming Tax in Canada

Follow the instructions in this chapter for programming the Canadian tax system for your cash register.

## Setting Flag Options

Set the following three flags to the appropriate settings for your business' needs:

Flag \# 13

$$
\begin{array}{ll}
\text { Flag \# 13 } & 0^{*}=\text { USA Tax System (add-on tax system) } \\
& 1=\text { Canadian Tax System } \\
& 2=\text { VAT Tax System } \\
\text { Flag \# 17 } & 0^{*}=\text { Sets the Non-Taxable Limit without GST tax for } \\
& \text { Canadian tax mode. }
\end{array}
$$

$1=$ Sets the Non-Taxable Limit with GST tax for Canadian tax mode.
Flag \# $22 \quad 0^{*}=$ Do NOT select Canadian Tax System of "Tax on Tax" piggyback
1 = Select Canadian Tax System of "Tax on Tax" piggyback
$2=$ Select Canadian Tax System of "Tax on Tax on Tax" piggyback

* $=$ The Factory Default Setting

To set Flag \# 13 to option 1 for the Canadian Tax System:
1 Put the PRG key in the Mode key slot and turn it to the PRG position.
2 Using the round Number keys, enter the one or two-digit Flag Number. In this example, enter 13.

3 Enter the one-digit option number for the proper setting. In this example, enter 1.

4 Press the Void key.
5 Set Flag \# 17 and \# 22 using the same procedure.
6 Go to the next section for the next set of steps.

## Setting Tax Percentage Rates

Note the following associations in the cash register:

- $\quad$ GST $=$ Tax 1
- $\operatorname{PST} 1=$ Tax 2
- $\operatorname{PST} 2=$ Tax 3
- $\quad$ PST3 $=$ Tax 4

To program GST as 7\%:
1 Enter the Tax Number from the list above. Since GST is Tax Rate \# 1, press 1.

2 Press the TAX1 key.
3 Enter the Non-Taxable Limit. For example, if the Non-Taxable Limit is $\$ 1.00$, then enter 100. Do not enter any decimal places.

## Note

Skip step 3 and step 4 if there is no Non-Taxable Limit in your area.
4 Press the Non Tax key.
5 Enter the Tax Percentage Rate as a 4-digit number. For example, if the percentage rate is $7 \%$, enter 7000 .

1 Enter the Tax Number from the chart above. Because PST1 is Tax Rate \# 2 , enter 2 .
$\operatorname{tax} 1$
2 Press the TAX1 key.

3 Enter the Non-Taxable Limit. For example, if the Non-Taxable Limit is $\$ 0.50$, enter 50. Do not enter any decimal places.

Note
Skip step 3 and step 4 if there is no Non-Taxable Limit in your area.
4 Press the Non Tax key.
5 Enter the Tax Percentage Rate as a 4-digit number. For example, if the percentage rate is $8 \%$, enter 8000 .
6 Press the TAX2 key.
7 Program PST2 and PST3, if needed, following the above steps, but using the correct Tax Rate Number for Step number 1.
8 When you are done, go to the next section for the next set of steps.

## Linking Tax Rate(s) To Each Department

The list below shows the Canadian tax chart.
00 Non-Taxable
01 GST only
05 GST and PST1
06 GST and PST2
07 GST and PST3
11 GST and PST1 and PST2
12 GST and PST1 and PST3
13 GST and PST2 and PST3
To link tax rates to departments, follow the general steps below. For more detailed information about linking tax rates to departments, see Setting Up Your Cash Register - Advanced on page 40. Remember to use the tax chart in this section.

To program a department:
1 Enter 000.
2 Enter the 2-digit number from the Canadian Tax Chart above. For example, for GST tax only, enter 01.
3 Press the Sub-Total w/Tax key.
4 Enter the price, or enter 0 if you do not want to program a default price.
5 Press the Department Key for the department number you are programming.
6 Enter an alphanumeric description.
7 Press the Check key.

## Product Information

## Specifications and Safety

| Feature | Description |
| :---: | :---: |
| Type | Electronic cash register |
| Displays | Two line alphanumeric operator display One line alphanumeric customer display |
| Capacity | 7 digit input and 10 digit readout |
| Printer | ECR exclusive alpha numeric printer. |
| Ink Source | Thermal alphanumeric printer - no ribbon needed |
| Paper Supply | Standard thermal paper Royal Reorder \# 013127 |
| Memory Battery Protection | Roughly 28 days after power interruption |
| Technology | CMOS RAM |
| Power <br> Consumption | Standby - 28W, Operating - 47W |
| Operating <br> Temperature | 0-40 Degrees Centigrade (32-104 Degrees Fahrenheit) |
| Dimensions | $10^{1 / 4}{ }^{\prime \prime} \times 16^{1 / 2}$ " $\times 133 / 4$ " |
| Weight | 20.0 lbs. |

## Safety and Legal Notices

- The power outlet for this cash register must be located near the unit and be easily accessible.
- Do not use this cash register outdoors in the rain or near any source of liquid, such as a pool.


## FCC Warning

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to correct the interference.

- The back-up power system: When you are not using your cash register, keep it plugged in with the control lock key in the OFF position. Back-up power is provided through the batteries, but this should not be used for long periods of time.


## Proposition 65 Notice

The following is given in accordance with California Proposition 65.
WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.

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## Limited Warranty

## ROYAL ELECTRONIC CASH REGISTER AND TIME CLOCK LIMITED WARRANTY

Royal Consumer Information Products, Inc. ("Royal") at 379 Campus Drive, 2nd Floor, in Somerset, NJ 08875 USA warrants that your NEW Royal Electronic Cash Register or Time Clock ("Product") is free of defects of workmanship and materials. If there is a defect or malfunction of this Product, Royal will repair the Product free of charge as follows:

PARTS: New or comparable rebuilt parts in exchange for defective parts for ONE YEAR from the date of purchase.

LABOR: All labor charges incurred from a Royal Authorized Service Center or the Royal Corporate Service Center are covered for 90 DAYS from the date of purchase. After 90 days there will be a labor charge for repair of the Product and/or assemblies such as the keyboard, display(s), logic board, power supply and printer(s) at the Royal Corporate Service Center's or the Royal Authorized Service Center's then prevailing rates. The Product must be brought to a Royal Authorized Service Center nearest to your location; or the Product must be shipped postage prepaid, insured and via a traceable shipping method to a Royal Authorized Service Center or to the Royal Corporate Service Center. Royal will pay return postage from the Royal Corporate Service Center during the labor warranty period only.

This warranty does not apply to persons who purchased this Product second hand or used.

This warranty does not include the replacement of ink rolls, ribbons, time cards, paper rolls or any other consumable or supplies used in the cash register or time clock and consumed through the normal use of the Product.

This warranty does not include cleaning, adjustments, parts, or repairs required by circumstances beyond the control of Royal, including, but not limited to, fire or other casualty, accident, neglect, abuse, abnormal use, misuse or battery leakage damages. THERE ARE NO OTHER EXPRESSED WARRANTIES EXCEPT AS STATED HEREIN. AFTER THE PERIOD OF EXPRESSED WARRANTY SET FORTH HEREIN, THERE ARE NO EXPRESSED OR IMPLIED WARRANTIES AND THOSE EXCLUDED INCLUDE THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Royal shall NOT be liable for CONSEQUENTIAL DAMAGES resulting from any failure, defect, or malfunction of this Product. Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

## TO OBTAIN SERVICE UNDER THE TERMS OF THIS WARRANTY:

- Pack your Product in the original carton or equivalent.
- Enclose a copy of the bill of sale or other documentation showing original purchase date.
- Enclose a card or note describing the difficulty you have had with the Product.
- Be sure to include your complete name, address and day-time telephone number.
- Bring or ship, prepaid and insured, via a traceable shipping method the above Product to the nearest Royal Authorized Service Center location or to the Royal Corporate

Service Center. The Royal and/or the Service Center cannot be held responsible for any loss or damage that occurs while in transit.
For Authorized Service Centers within your local area, please call 1-888-261-3888 or $+1-732-563-9944$. In Canada call 1-888-266-9380. Or you may call the Royal Corporate Service Center directly at 1-708-615-8124 for shipping instructions and additional information.

Please retain the original proof of purchase for your records to establish date of original purchase. Your warranty starts with the date of original purchase. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

This warranty is valid only on cash registers and time clocks purchased, delivered and used in the United States and/or Canada.

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## APPENDIX

## Settings Tables

This section shows you all the tables of codes and other settings you need in one convenient place. These tables are also listed throughout this manual.

## Alphanumeric Code Chart

Use the tables in this section to help you set up alphanumeric descriptions such as department names, clerk names and other text that appears on displays and receipts.

Use this table for lower case letters and numbers.
Table 26 Letters and numbers

| Character | Code <br> Number | Character | Code <br> Number |
| :---: | :---: | :---: | :---: |
| Space | 00 | s | 20 |
| Wide Character | 01 | t | 21 |
| a | 02 | u | 22 |
| b | 03 | v | 23 |
| c | 04 | w | 24 |
| d | 05 | x | 25 |
| f | 06 | y | 26 |

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Table 26 Letters and numbers

| Character | Code <br> Number | Character | Code <br> Number |
| :---: | :---: | :---: | :---: |
| g | 08 |  |  |
| h | 09 | Numbers |  |
| i | 10 | 0 | 30 |
| $j$ | 11 | 1 | 31 |
| k | 12 | 2 | 32 |
| m | 13 | 3 | 33 |
| n | 14 | 4 | 34 |
| p | 15 | 5 | 35 |
| q | 16 | 7 | 8 |
| r | 18 | 9 | 36 |

Use this table for punctuation and foreign characters.
Table 27 Special Characters and Punctuation

| Character | Code <br> Number | Character | Code Number |
| :---: | :---: | :---: | :---: |
| i | 80 | ? | 28 |
| ¿ | 81 | ! | 29 |
| á | 82 | @ | 40 |
| é | 83 | 1 | 67 |
| í | 84 | : | 68 |
| ó | 85 | \# | 69 |
| ú | 86 | \& | 70 |
| ̈̈ | 93 | \% | 71 |
| Ü | 94 | \$ | 72 |
| Ö | 95 | (comma) | 73 |
| $\ddot{\mathrm{I}}$ | 96 | $($ | 74 |

Table 27 Special Characters (Continued) and Punctuation

| Character | Code Number | Character | Code Number |
| :---: | :---: | :---: | :---: |
| ü | 97 | ) | 75 |
| $\tilde{\mathrm{N}}$ | 98 | * | 76 |
| ñ | 99 | + | 77 |
|  |  | - | 78 |
|  |  | (period) | 79 |
|  |  | (semi colon) | 87 |
|  |  | > | 88 |
|  |  | (apostrophe) | 89 |
|  |  | " | 90 |
|  |  | $<$ | 91 |
|  |  | $=$ | 92 |

Flags
The following table shows all Flags settings and their actions. Bold numbers are the default.

Table 28 Flag options

| This Flag <br> number... | Sets these actions... | Set <br> to... |
| :--- | :--- | :--- |
| 1 | The Grand Total does not reset after a Z reading. | 0 |
|  | The Grand Total resets after a Z reading. | 1 |
| 2 | Subtotal prints on sales receipts when \#/ST/NS key <br> is pressed. | 0 |
|  | Subtotal does not print on sales receipts when <br> \#/ST/NS key is pressed. | 1 |
| 3 | Tendering of change is not required. | 0 |
|  | Tendering of change is required. | 1 |

Table 28 Flag options (Continued)

| This Flag number... | Sets these actions... | Set to... |
| :---: | :---: | :---: |
| 4 | The Date prints as Month-Day-Year. | 0 |
|  | The Date prints as Day-Month-Year. | 1 |
| 5 | Z1 and Z2 Counter Numbers do not reset after a Z1 or Z2 report. | 0 |
|  | Z1 and Z2 Counter Numbers reset after a Z1 or Z2 report. | 1 |
| 6 | Tax Rate Amount prints on sales receipts. | 0 |
|  | Tax Rate Amount does not print on sales receipts. | 1 |
| 7 | Skips amounts equaling zero on financial reports. | 0 |
|  | Does not skip amounts equaling zero on financial reports. | 1 |
| 8 | The Date prints on sales receipts and management reports. | 0 |
|  | The Date does not print on sales receipts and management reports. | 1 |
| 9 | The Time prints on sales receipts and management reports. | 0 |
|  | The Time does not print on sales receipts and management reports. | 1 |
| 10 | The Consecutive Number prints on the receipt. | 0 |
|  | The Consecutive Number does not print on the receipt. | 1 |
| 11 | The Clerk Name prints on sales receipts. | 0 |
|  | The Clerk Name does not print on sales receipts. | 1 |
| 12 | Clerk System inactive. | 0 |
|  | Clerk System active. | 1 |
| 13 | USA Tax System. | 0 |
|  | Canadian Tax System. | 1 |
|  | VAT Tax System. | 2 |
| 14 | Z1/Z2 Counter prints. | 0 |
|  | Z1/Z2 Counter does not print. | 1 |

Table 28 Flag options (Continued)

| This Flag number... | Sets these actions... | Set <br> to... |
| :---: | :---: | :---: |
| 15 | Tax amount prints after the sales total on the sales receipt. | 0 |
|  | Tax amount prints before the total amount on the sales receipt. | 1 |
| 16 | Standard Department Keyboard layout. | 0 |
|  | Department 20 is Credit 1. | 1 |
|  | Department 19 is Credit 2. | 2 |
|  | Department 20 is Credit 1 and Department 19 is Credit 2. | 3 |
| 17 | Sets the non-Taxable Limit without GST tax for Canadian tax mode. | 0 |
|  | Sets the non-Taxable Limit with GST tax for Canadian tax mode. | 1 |
| 18 | Time appears on the display and prints in 24 hour mode. | 0 |
|  | Time appears on the display and prints in 12 hour ( $\mathrm{am} / \mathrm{pm}$ ) mode. | 1 |
| 19 | Sets the language for the cash register. The options are: |  |
|  | English | 0 |
|  | Spanish | 1 |
|  | French | 2 |
|  | German | 3 |
| 20 | A Clerk Number is not required before each transaction. | 0 |
|  | A Clerk Number is required before each transaction. | 1 |
|  | Note <br> Flag \# 12 must be set to 1 so the clerk system is active any setting for Flag \# 20 can take effect. | before |
| 21 | Receipt printer is turned ON in Reg2 mode. | 0 |
|  | Receipt printer is turned OFF in Reg2 mode. | 1 |

Table 28 Flag options (Continued)

| This Flag number... | Sets these actions... | $\begin{aligned} & \text { Set } \\ & \text { to... } \end{aligned}$ |
| :---: | :---: | :---: |
| 22 | Do not select Canadian tax system of Tax on Tax | 0 |
|  | Select Canadian Tax on Tax system. | 1 |
|  | Select Canadian Tax on Tax on Tax system. | 2 |
|  | Note <br> Flag \# 13 must be set to 1 before setting this flag. |  |
| 23 | $-\%$ is subtracted and $+\%$ is added to department totals on $\mathrm{X} / \mathrm{Z}$ readings. | 0 |
|  | $-\%$ is not subtracted and $+\%$ is not added to department totals on $\mathrm{X} / \mathrm{Z}$ readings. | 1 |
| 24 | TAX amounts print separately on sales receipts. | 0 |
|  | TAX amounts print as one figure on sales receipts. The letters "TX" print next to the total of tax. | 1 |
| 25 | Duplicate Z report can be printed. | 0 |
|  | Duplicate Z report cannot be printed. | 1 |
| 26 | Consecutive receipt number resets after Z1 Report. | 0 |
|  | Consecutive receipt number does not reset after Z1 Report. | 1 |
| 27 | 0 price registration is allowed. | 0 |
|  | 0 price registration is not allowed. | 1 |
| 28 <br> (Europe <br> Only) | Euro convert function is allowed. | 0 |
|  | Euro convert function is not allowed. | 1 |
| 29 | Tax rate does not print on financial report in VAT mode. | 0 |
|  | Tax rate prints on financial report in VAT mode. | 1 |
| $30$ <br> (Europe Only) | Print converted total at convert tender. | 0 |
|  | Print converted total always tender. | 1 |
| $31$ <br> (Europe Only) | Local base currency. | 0 |
|  | Euro base currency. | 1 |

Table 28 Flag options (Continued)

| This Flag number... | Sets these actions... | Set <br> to... |
| :---: | :---: | :---: |
| 32 | Allow Clerk numbers without security code. | 0 |
|  | Clerk must also enter the 3 digit security code. | 1 |
| 33 | The Header message does not print. | 0 |
|  | The Header message prints. | 1 |
| 34 | Second receipt cannot be issued. Receipt reprint option disabled. | 0 |
|  | Second receipt can be issued. Receipt reprint option enabled. | 1 |
| 35 | Only transaction totals for each receipt are stored in the Electronic Journal. | 0 |
|  | Line-by-line transaction details for each receipt are stored in the Electronic Journal. | 1 |
|  | Note <br> Flag \# 36 must be set to 0 (active) before any setting Flag \# 35 can take effect. |  |
| 36 | Activate Electronic Journal. | 0 |
|  | De-activate Electronic Journal. | 1 |
| 37 | Do not print Footer message at the bottom of the receipt. | 0 |
|  | Print Footer message at the bottom of the receipt. | 1 |
| 38 | Print blank lines in the Header and Footer. | 0 |
|  | Do not print blank lines in the Header and Footer. | 1 |
| 39 | Prints a blank line for that specific line of the Header message or Footer message. | 0 |
|  | Prints the factory default text for that one specific line of the Header message or Footer message. | 1 |

## Language Table

The following table shows the text your cash register prints in the languages programmed in your cash register.

Table 29 Language Descriptions

| ENGLISH | SPANISH | FRENCH | GERMAN | PRINT LOCATION |
| :---: | :---: | :---: | :---: | :---: |
| COUPON | CUPON | COUPON | MINUS | SALES RECEIPT |
| DISCOUNT | DESCUENTO | REMISE | RABATT | SALES RECEIPT |
| ADD ON | INCREMENTO | MAJORATION | AUFSCHLAG | SALES RECEIPT |
| CHARGE | CARGO | C-CREDIT | KREDIT | SALES RECEIPT |
| VOID/CORR | ANUL/CORRC | CORRECTION | STORNO | SALES RECEIPT |
| SUBTTL | SUBTOTAL | SOUS-TOTAL | ZWSUMME | SALES RECEIPT |
| CHANGE | CAMBIO | RENDU | RUCKGELD | SALES RECEIPT |
| CASH | EFECTIVO | ESPECES | BAR | SALES RECEIPT |
| PRICE | PRECIO | PRIX | PREIS | SALES RECEIPT |
| AMOUNT | CANTIDAD | MONTANT | BETRAG | SALES RECEIPT |
| CHECK | CHEQUE | CHEQUE | SCHECK | SALES RECEIPT |
| T1 | T1 | T1 | S1 | SALES RECEIPT |
| T2 | T2 | T2 | S2 | SALES RECEIPT |
| T3 | T3 | T3 | S3 | SALES RECEIPT |
| T4 | T4 | T4 | S4 | SALES RECEIPT |
| REFUND- | REEMBOLSO | RETOUR | RUCKZAHLUNG | SALES RECEIPT |
| TOTAL | TOTAL | TOTAL | GESAMT | SALES RECEIPT |
| PAID OUT | SALIDAS | SORTIE | AUSZAHLUNG | SALES RECEIPT |
| RECD ACCT | A CUENTA | ENTREE | EINZAHLUNG | SALES RECEIPT |
| NO SALE | NO VENTA | NON-VENTE | NULL BON | SALES RECEIPT |
| COUPON | CUPON | COUPON | MINUS | PROGRAM <br> PRINT |
| DISCOUNT | DESCUENTO | REMISE | RABATT | PROGRAM PRINT |
| ADD ON | INCREMENTO | MAJORATION | AUFSCHLAG | PROGRAM PRINT |
| CHARGE | CARGO | C-CREDIT | KREDIT | PROGRAM PRINT |
| R-A- | A CUENTA | ENTREE | EINZAHLUNG | PROGRAM PRINT |
| P-O- | SALIDAS | SORTIE | AUSZAHLUNG | PROGRAM PRINT |
| VOID/CORR | ANUL/CORRC | CORRECTION | STORNO | PROGRAM PRINT |
| SUBTTL | SUBTOTAL | SOUS-TOTAL | ZWSUMME | PROGRAM PRINT |
| PLU NO. | PLU NO | PLU-NO | PLU-NR | PROGRAM PRINT |
| T1 | T1 | T1 | S1 | PROGRAM PRINT |

Table 29 Language Descriptions (Continued)

| ENGLISH | SPANISH | FRENCH | GERMAN | PRINT LOCATION |
| :---: | :---: | :---: | :---: | :---: |
| T2 | T2 | T2 | S2 | PROGRAM PRINT |
| T3 | T3 | T3 | S3 | PROGRAM PRINT |
| T4 | T4 | T4 | S4 | PROGRAM PRINT |
| COUPON | TL-CUPON | TL-COUPON | MINUS | MANAGEMENT REPORT |
| DISCOUNT | DESCUENTO | TL-REMISE | RABATT | MANAGEMENT REPORT |
| ADD ON | TL-INCREM | TL-MAJOR | AUFSCHLAG | MANAGEMENT REPORT |
| CHARGE | CARGO | TL-C-DRED | KREDIT | MANAGEMENT REPORT |
| VOID/CORR | ANUL/CORRC | TL-CORREC | STORNO | MANAGEMENT REPORT |
| RECD ACCT | A CUENTA | TL-ENTREE | EINZAHLUNG | MANAGEMENT REPORT |
| PAID OUT | SALIDAS | TL-SORTIE | AUSZAHLUNG | MANAGEMENT REPORT |
| NO SALE | NO VENTA | TL-NON-VTE | NULL BON | MANAGEMENT REPORT |
| CHECK | CHEQUE | TL-CHEQUE | SCHECK | MANAGEMENT REPORT |
| DEPTTL | TOTAL DPTO | TL-DEPART | WG TOTAL | MANAGEMENT REPORT |
| REFUND | REEMBOLSO | TL-RETOUR | RUCKZAHLNG | MANAGEMENT REPORT |
| TAX 1 | T1 | TL-TVA1 | T1 | MANAGEMENT REPORT |
| TAX 2 | T2 | TL-TVA2 | T2 | MANAGEMENT REPORT |
| TAX 3 | T3 | TL-TVA3 | T3 | MANAGEMENT REPORT |
| TAX 4 | T4 | TL-TVA4 | T4 | MANAGEMENT REPORT |
| NET | NETO | TL-NET | NETTO | MANAGEMENT REPORT |
| GROSS | BRUTO | TL-BRUT | BRUTTO | MANAGEMENT REPORT |
| GT | GRAN TOTAL | GT | GT | MANAGEMENT REPORT |
| C-I-D | EFECTIVO CAJA | NET-TIROIR | G-I-S | MANAGEMENT REPORT |
| CASH | EFECTIVO | TOT-ESPECE | BARGELD | MANAGEMENT REPORT |

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Table 29 Language Descriptions (Continued)

| ENGLISH | SPANISH | FRENCH | GERMAN | PRINT LOCATION |
| :--- | :--- | :--- | :--- | :--- |
| T1 | T1 | T1 | S1 | MANAGEMENT |
| REPORT |  |  |  |  |

Table 29 Language Descriptions (Continued)

| ENGLISH | SPANISH | FRENCH | GERMAN | PRINT LOCATION |
| :---: | :---: | :---: | :---: | :---: |
| CLERK PASS | COD CAJERO | CODE VEND | VERK CODE | DISPLAY DURING PROGRAMMING |
| CLERK NAME | NOMBRE CAJ | NOM VEND | VERK NAME | DISPLAY DURING PROGRAMMING |
| DEPT PRICE | PRECIO DEP | PRIX DEPT | WG PREIS | DISPLAY DURING PROGRAMMING |
| DEPnn NAME | NOMBRE Dnn | NOM DEPTnn | WGnn NAME | DISPLAY DURING PROGRAMMING |
| LOGO LINEn | LOGO LIN n | Ln LOGO H | LOGOn KOPF | DISPLAY DURING PROGRAMMING |
| FOOT LINEn | PIE PAG Ln | Ln LOGO B | LOGOn FUSS | DISPLAY DURING PROGRAMMING |
| CRED1 NAME | NOMBRE CR1 | NOM CRED 1 | KARTE1NAME | DISPLAY DURING <br> PROGRAMMING |
| CRED2 NAME | NOMBRE CR2 | NOM CRED 2 | KARTE2NAME | DISPLAY DURING PROGRAMMING |
| PRG/Z PASS | COD PGR/Z | CODE PRG/Z | PRG/Z CODE | DISPLAY DURING PROGRAMMING |
| X PASS | CODIGO X | CODE X | X CODE | DISPLAY DURING PROGRAMMING |
| GT PRESET | PRE GT | PROG GT | GT PROG | DISPLAY |
| IDLE-1 MES | MENS 1 | M 1 REPOS | LEERLF-1 | DISPLAY DURING <br> PROGRAMMING |
| IDLE-2 MES | MENS 2 | M 2 REPOS | LEERLF-2 | DISPLAY DURING <br> PROGRAMMING |
| SALES MES. | MENS FINAL | M VENTE | VERK MES. | DISPLAY DURING PROGRAMMING |
| MODE MES. | MEN M PROG | MODE | MODE MES. | DISPLAY DURING <br> PROGRAMMING |
| OFF MES. | MEN M APAG | ARRET | AUS MES. | DISPLAY DURING PROGRAMMING |
| SEC CODE | COD SEGURI | COD SECRET | GEHEIMCODE | DISPLAY |
| NON TAX | SIN IVA | SANS TVA | OHNE MWST | DISPLAY |
| DATE | FECHA | DATE | DATUM | DISPLAY |
| ERROR | ERROR | ERREUR | FEHLER | DISPLAY |
| ENTER PLU\# | INTRO PLU\# | ENTR PLU\# | EING.PLU\# | DISPLAY |
| RE-CLERK\# | RE CAJERO\# | VENDEUR \# | VERKAEUFR\# | DISPLAY |
| P.RESET | P RESET | R A O PROG | PROG NEU | DISPLAY |
| LOCAL | LOCAL | DEVISES | FREMDWAEG | DISPLAY |
| EURO | EURO | EURO | EURO | DISPLAY |
| CONV.NET | CONV NET | NET. CONV | NETTO UMRG | DISPLAY |

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Table 29 Language Descriptions (Continued)

| ENGLISH | SPANISH | FRENCH | GERMAN | PRINT LOCATION |
| :---: | :---: | :---: | :---: | :---: |
| FREE nnnnL | LIBREnnnnL | nnnnL ELJ | nnnnL E.J. | DISPLAY |
| ELECTRIC JOURNAL | DIARIO ELECTRONI | JOURNAL ELECTRO | ELECTRON JOURNAL | ELECTRONIC JOURNAL REPORT |
| E.JOURNAL CLEAR | BORRAR REP ELEC | REMISE O ELJ | E. JOURN LOESCHEN | ELECTRONIC JOURNAL REPORT |
| E.JOURNAL USED | DIA ELEC USADO | ELJ UTILISE | E. JOURN EIN | ELECTRONIC JOURNAL REPORT |
| E.JOURNAL FREE | DIA ELEC LIBRE | ELJ DISPONIBLE | E. JOURN FREI | ELECTRONIC JOURNAL REPORT |
| BAR CODE | BAR CODE | CODE BARRE | BAR CODE | MANAGEMENT REPORT |
| OFF TIME | FUERA TIEM | TEMPS DEP | AUS ZEIT | MANAGEMENT REPORT |
| LOCAL | LOCAL | DEVISES | FREMDWAEG | MANAGEMENT REPORT |
| EURO | EURO | EURO | EURO | MANAGEMENT REPORT |
| PLU NUMBER | PLU NO. | NUMERO PLU | PLU-NR. | DISPLAY DURING PROGRAMMING |
| PLU PRICE | PLU PRECIO | PRIX PLU | PLU-PREIS | DISPLAY DURING PROGRAMMING |
| PLU NAME | PLU NOMBRE | NOM PLU | PLU-NAME | DISPLAY DURING PROGRAMMING |
| E.J.-FULL | D.E. SAT | J.E.-PLEIN | EJ VOLL | DISPLAY |
| CLOSED, NEXT <br> REGISTER PLEASE | CERRADA; ACUDA A OTRA CAJA | FERMEE. CAISSE SUIVANTE SVP | GESCHLOSSEN, NACHSTE KASSE BITTE | DISPLAY - SCROLLING MESSAGE |
| PLEASE WAIT | ESPERE, POR FAVOR | VEUILLEZ <br> PATIENTER | BITTE WARTEN | DISPLAY - SCROLLING MESSAGE |
| PLEASE TAKE <br> YOUR RECEIPT | TOME SU RECIBO, POR FAVOR | SVP, PRENEZ VOTRE RECU | NEHMEN SIE BITTE IHREN KASSENZETTEL | DISPLAY - SCROLLING MESSAGE |
| GOOD MORNING | BUENOS DIAS | BONJOUR | GUTEN MORGEN | DISPLAY - SCROLLING MESSAGE |
| $\begin{aligned} & \text { GOOD } \\ & \text { AFTERNOON } \end{aligned}$ | BUENAS TARDES | BONJOUR | GUTEN TAG | DISPLAY - SCROLLING MESSAGE |

## Transaction Codes

The following codes appear on transaction receipts:
Table 30 Transaction Codes

| The code... | Means this... |
| :---: | :---: |
| \# | Reference Number |
| @ | Amount Being Multiplied |
| AMOUNT | Amount of Cash Tendered |
| ADD ON | Plus Percent |
| CASH | Cash Transaction Total |
| CHANGE | Change |
| CHARGE | Charge Transaction Total |
| CHECK | Check Transaction Total |
| Clerk \#1 to Clerk \#n | Clerk number 1 to number n where $\mathrm{n}=$ the maximum number of clerks |
| COUPON | Coupon |
| CREDIT | Credit card transaction |
| DISCOUNT | Minus Percent Discount |
| DUPLICATE RECEIPT | After a transaction, you can print a duplicate receipt by pressing the Subtotal w/Tax key immediately after the original receipt has finished printing and before another transaction is started |
| NO SALE | No-Sale Function or Open Cash Drawer |
| PAID OUT | Paid Out |
| *PRICE* | Overriding of a PLU Price |
| RECD ACCT | Received on Account |
| REFUND | Return (Refund) |
| SUBTTL | Subtotal (Excludes Tax) |
| T1 | Tax 1 Rate Applied to a Sale |
| T2 | Tax 2 Rate Applied to a Sale |
| T3 | Tax 3 Rate Applied to a Sale |
| T4 | Tax 4 Rate Applied to a Sale |


| Table 30 Transaction Codes (Continued) |  |
| :--- | :--- |
| The code... | Means this... |
| TOTAL | Total of Sale |
| TX | Represents Tax Total if Option 1 is selected on Flag <br> 24. For more information, see Programming Flag <br> Options on page 65 |
| VOID/CORR | Void |
| $X$ | Number of Items Being Multiplied |

## US Tax Status Numbers

When you program US tax codes, use the following table.
Table 31 Tax status settings

| This tax status <br> number... | Means this... |
| :--- | :--- |
| 00 | Non-Taxable (use this if you do not want to charge tax) |
| 01 | Taxable by TAX 1 Rate |
| 02 | Taxable by TAX 2 Rate |
| 03 | Taxable by TAX 3 Rate |
| 04 | Taxable by TAX 4 Rate |
| 05 | Taxable by TAX 1 and TAX 2 Rates |
| 06 | Taxable by TAX 1 and TAX 3 Rates |
| 07 | Taxable by TAX 2 and TAX 3 Rates |
| 08 | Taxable by TAX 2 and TAX 4 Rates |
| 09 | Taxable by TAX 3 and TAX 4 Rates |
| 10 | Taxable by TAX 1, TAX 2 and TAX 3 Rates |
| 11 | Taxable by TAX 1, TAX 3 and TAX 4 Rates |
| 12 | Taxable by TAX 2, TAX 3 and TAX 4 Rates |
| 13 | Taxable by TAX 1, TAX 2, TAX 3 and TAX 4 Rates |

## Ordering Supplies and Accessories

Table 32 Accessories

| Item | Part Number |
| :--- | :--- |
| Thermal Register Tape (3-roll package) <br> $2^{1 / 4 "}(57 \mathrm{~mm})$ wide, 2" 50 mm$)$ diameter, 85 <br> $(26 \mathrm{~m})$ long | 013127 |
| Protective Keytop Cover | 013218 |
| Replacement 4 Slot Bill Tray \& Drawer <br> (Coin Tray not included) | CD510002 |
| Replacement 5 Coin Tray | CD500002 |
| Duplicate Cash Drawer <br> 1 set of 2 keys | 47300511 |
| Duplicate Control Lock Key Set <br>  <br> Z-427-012, 2 each | 47100324 |
| Replacement Journal Paper Roll Spindle | TBD |
| Replacement UV light bulb for Counterfeit <br> detector | $00-02701200$ |
| Owner's Manual | A600/601IM1002A |
| Replacement Model PS700 Barcode Reader | 16881 W |

Table 32 Accessories (Continued)
Item Part Number

RegisterLink PC-based software, replacement RLNC
RegisterLink serial cable, replacement. Included RLCC with the Alpha 601. Purchase separately for the Alpha 600.
RegisterLink software and serial cable, RLKIT replacement

For Prices and Availability
Call 1-888-261-4555 Monday - Friday 8:30-5:00 p.m. (E.S.T.) or visit our web site at www.royal.com.
Prices and Availability Subject to Change Without Notice

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[^0]:    amount tend total

