CAUTION

The socket-outlet shall be installed near the equipment and shall be easily accessible.

FOR YOUR RECORDS

Please record below the model number and serial number, for easy reference, in case of loss or theft. These numbers are located on the right side of the unit. Space is provided for further pertinent data.

Model Number_____

Serial Number_____

Date of Purchase_____

Place of Purchase_____

Handling Cautions

Install the cash register in a location not subject to direct sunlight, unusual temperature changes, high humidity, or splashing water.

Do not operate the cash register with wet hands. Water can cause internal component failure.

The cash register plugs into any standard wall outlet (local voltage ± 10% AC).
Avoid connecting any other electrical devices on the same electrical circuit since such connection could cause the cash register to malfunction.

When cleaning the cash register, use a dry, soft cloth. Never use volatile liquids, such as benzine or thinner. Chemicals can discolor or damage the cabinet.

For protection against data loss, please install three new "AA" batteries before using the cash register. However, never forget you must initialize the cash register before installation of batteries; otherwise damage to memory contents or malfunctioning of the register will occur. You can start operating it only after initializing and then installing batteries.

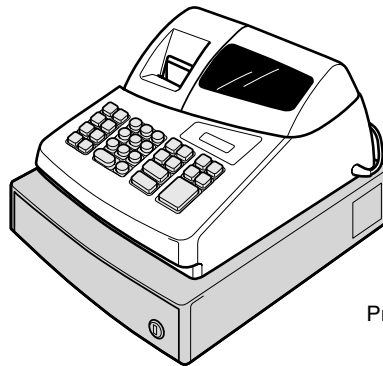For complete electrical disconnection, pull out the main plug.

SHARP

Thank you for purchasing the SHARP Electronic Cash Register Model XE-A101. Please read this manual carefully before operating your machine. Keep this manual for future reference. It will help you solve any operational problems that you may encounter.

Customer Service Hotline
1-905-568-7140

For Easy Set-up,
See "Getting Started"

Getting Started

Initializing the Cash Register

For your cash register to operate properly, you must initialize it before programming for the first time. Follow this procedure.
1. **Remove the register from its packing carton.**
2. **Set the mode switch to the REG position.**
3. **Insert the plug into the AC outlet.**
   IMPORTANT: This operation must be performed without batteries loaded.
4. **The buzzer will sound three times. Now your cash register has been initialized. The display will show "0.00" with " ∟ ". (The " ∟ " indicates that the batteries are not installed.)**

Installing a Paper Roll

Always install the paper roll even when you set the register for not printing a journal or receipt in REG mode.

1. **Push the printer cover forward and detach it.**
2. **Push the paper roll release lever and install the paper roll so that the paper unrolls from the bottom and towards the front.**
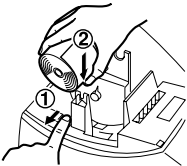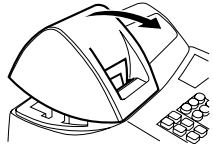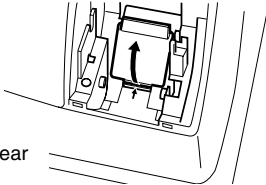
Installing Batteries

Batteries must be installed in the cash register to prevent data and programmed contents from being lost from the memory in case of accidental disconnection of the AC cord or power failure. Please install three new "AA" batteries before programming and operating the cash register. Once installed, the batteries will last approximately one year. When it is time to replace them, the " ∟ " symbol will appear on the display to indicate a low battery voltage. If the symbol appears, you must replace them within two days.
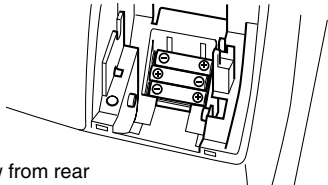Install the batteries according to this procedure with the AC cord connected:

1. **Pull the printer cover upward and detach it.**

2. **Open the battery cover next to the paper roll cradle.**

View from rear

3. **Insert three new "AA" batteries.**

View from rear

4. **When the batteries are properly installed, " ∟ " on the display will disappear. Close the battery cover.**
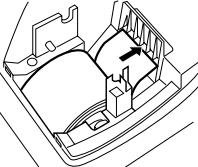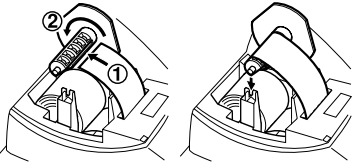
5. **Attach the printer cover.**

⚠ Improper use of batteries could cause them to burst or leak, which might damage the interior of the cash register. Please take the following precautions:
Be sure that the positive (+) and negative (-) poles of each battery are oriented properly. .
• Never mix batteries of different types.
• Never mix old batteries and new ones.
• Never leave dead batteries in the battery compartment.
• Remove the batteries if you plan not to use the cash register for long periods.
Should a battery leak, clean out the battery compartment immediately, taking care not to let the battery fluid come into direct contact with your skin.

3. **Insert the paper straight into the paper inlet, and press the ↑ key. The inserted end comes out at the printing area.**

4. **(For journal printing) Insert the top end of the paper into the slit in the take-up spool shaft and wind the paper two or three turns. Then place the take-up spool on the bearing.**
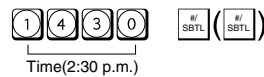
5. **Attach the printer cover.**
(For receipt printing, step 4 should be omitted.)

Setting the Time

Set the mode switch to the Z/PGM position and enter the time in 4 digits ("hhmm" format) using the 24 hour system. Press the [#/SBTL] key once to continue programming or twice to exit the program mode.

[1] [4] [3] [0] → [#/SBTL] ([#/SBTL])
Time(2:30 p.m.)

NOTE
• Always enter the time in 4 digits even when the hour is in the single digit. For example, enter [0] [6] [3] [0] for 6:30 a.m.
• 6:30 a.m. prints as "6-30" and 6:30 p.m. prints as "6-30@".

Setting the Date

In the Z/PGM mode, enter the date in 6 digits using the month-day-year format. Press the [#/SBTL] key once to continue programming or twice to exit the program mode.

[0] [3] [1] [5] [0] [2] → [#/SBTL] ([#/SBTL])
Date(March 15, 2002)
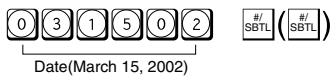
NOTE Always enter the date in 6 digits. For example, enter [0] [3] [1] [5] [0] [2] for March 15, 2002. If you change the date format in the Z/PGM mode, follow the newly specified format when setting the date.

Checking the Time and Date

You can display the time and date to check if they are correctly set.
1. Set the mode switch to the REG position.
2. Press the [@/TM] key once to display the time.
3. Press the [@/TM] key a second time to display the date.

Tax Programming

Before you can proceed with registration of sales, you must first program the tax that is levied in accordance with the law of your province. Your cash register comes with the ability to program four different tax rates. There are two types of tax program: GST (Goods and Service Tax) and PST (Provincial Sales Tax) and the tax calculation method varies from province to province. Your cash register, however, can be programmed to calculate Canadian taxes automatically.

1. Selecting the Tax Calculation System

You must select one among the eleven types of tax calculation system listed below depending on your province and the type of your retail business. These types represent different combinations of taxation methods. There are mainly two types of taxation methods (VAT or Add on Tax) for GST and two for PST (tax on base or tax on tax). Whether to use the "tax on tax" system or the "tax on base" system as the taxation method varies from province to province. Contact your local tax office for further sales tax information.

	Tax 4 Method	Tax 3 Method		Tax 2,1 Method
	GST	GST	PST	PST
Type 1	VAT	VAT	-	Tax on tax
Type 2	VAT	VAT	-	Tax on base
Type 3	VAT	-	Tax on tax	Tax on base
Type 4	VAT	-	Tax on base	Tax on base
Type 5	Add on Tax	-	Tax on tax	Tax on tax
Type 6	Add on Tax	-	Tax on base	Tax on tax
Type 7	Add on Tax	VAT	-	Tax on tax
Type 8	Add on Tax	VAT	-	Tax on base
Type 9	Add on Tax	Add on Tax	-	Tax on tax
Type 10	Add on Tax	Add on Tax	-	Tax on base
Type 11	VAT	-	VAT(Tax on base)	Tax on tax

Example: Selecting tax calculation system type 6 (most common type for Canada)
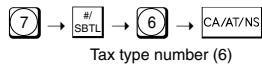
[7] → [#/SBTL] → [6] → [CA/AT/NS]
Tax type number (6)

2. Setting the Tax Rate

Specify a percent tax rate for GST and/or PST. You can also set the minimum taxable amount for each tax. Use the following sequence.

[9] → [#/SBTL] → Tax No. (1-4) → [@/TM] → R → [@/TM] → Q → [CA/AT/NS]
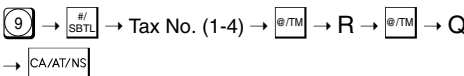
R: Tax rate (0.0000% to 99.9999%)x10000
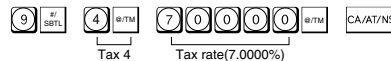Enter the rate in 6 digits. Leading zeros may be omitted.
Q: Minimum taxable amount (0.01 to 99.99)x100
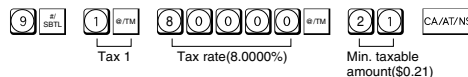Smallest amount for which tax must be collected.

To program a GST, use Tax 4; and to program two GSTs, use Tax 3 and 4.
To program a PST, use Tax 1; to program two PSTs, use Tax 1 and 2; and to program three PSTs, use Tax 1, 2 and 3.

Example:
GST rate 7% for tax 4

[9] [#/SBTL] [4] [@/TM] [7] [0] [0] [0] [0] [0] [@/TM] [CA/AT/NS]
Tax 4   Tax rate(7.0000%)

PST rate 8% and minimum taxable amount $0.21 for tax 1

[9] [#/SBTL] [1] [@/TM] [8] [0] [0] [0] [0] [0] [@/TM] [2] [1] [CA/AT/NS]
Tax 1   Tax rate(8.0000%)   Min. taxable amount($0.21)

You can also set a tax table instead of the percent tax rate. For tax table programming, refer to "Programming".

3. Programming by Department (taxable and other statuses)

You need to specify each department as taxable or non-taxable. Merchandise can be classified into eight departments. Data on sales of classified items such as quantities sold and sales amounts will be printed later in a report on a department-by-department basis. Upon entry of sale of an item belonging to a taxable department, an appropriate tax is charged automatically.
You can alter the taxable status and/or other statuses (+/- sign, single item cash sale function, and entry digit limit) for each department, using the following sequence:

ABCDEFG → [@/TM] → Department key* (→ [#/SBTL])

* For departments 5 to 8, first press the department shift key, then the appropriate department key.

where A to G represent the following choices:
A: + sign or - sign
Enter 0 for + or 1 for -.
B: Single item Cash Sale (SICS) function
Enter 0 for normal or 1 for single item cash sale.
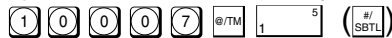**C, D, E and F: Taxable status**
Enter 0000 for non taxable, 0001 for taxable 1,0010 for taxable 2, 0100 for taxable 3,1000 for taxable or 1001 for taxable 1 and 4.
G: Entry digit limit (0 to 7 digits)
Enter 0, 1, 2, 3, 4, 5, 6, or 7.

Below are the most common examples for department setup when using tax system types 3, 4, 5, and 6 (as set in "1. Selecting the Tax Calculation System" above).

Setting department 1 for tax 4 GST/HST only:
[1] [0] [0] [0] [7] [@/TM] [1] [5] ([#/SBTL])
Setting department 1 for tax 4 GST and tax 1 PST:
[1] [0] [0] [1] [7] [@/TM] [1] [5] ([#/SBTL])
Setting department 1 for tax 4 GST and tax 2 PST:
[1] [0] [1] [0] [7] [@/TM] [1] [5] ([#/SBTL])
Settting department 1 for tax 4 GST and tax 3 PST:
[1] [1] [0] [0] [7] [@/TM] [1] [5] ([#/SBTL])
Setting department 1 for non-taxable:
[7] [@/TM] [1] [5] ([#/SBTL])
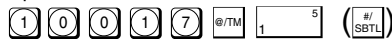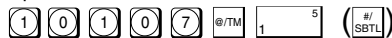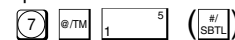
NOTE:
To program other departments just substitute another department key for the key for department 1 in the above examples.
In the above examples, + sign, normal department, and 7 digits for entry digit limit are also set.

Entries

Operation Examples

When Paid by Cash

1. Set the mode switch to the REG position.
2. Enter the clerk code (1 to 4) and press [CLK#]. (Once the clerk code is entered, you need not enter the clerk code at the start of each transaction until the clerk is changed.)
3. Enter the price for the first item.
4. Press the appropriate department key.
5. Repeat steps 2 and 3 for all the remaining items.
6. Press [#/SBTL] to display the amount due including any tax (you can omit this step).
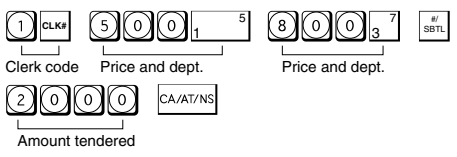7. Enter the amount received from the customer (you can omit this step if the amount tendered is the same as the subtotal).
8. Press [CA/AT/NS], and the change due or deficit is displayed and the drawer opens.
9. Close the drawer.

[1] [CLK#] [5] [0] [0] [1] [5] [8] [0] [0] [3] [#/SBTL]
Clerk code Price and dept. Price and dept.

[2] [0] [0] [0] [CA/AT/NS]
Amount tendered

When Paid by a Credit Card

Press [CH] at the end of the transaction. The amount tendered cannot be entered.

When Paid by Check

Press [CHK] at the end of the transaction. The amount tendered can be entered like a cash sale and the change due is displayed.

Mixed Tender Sale

When the amount tendered by cash or check is less than the sales amount including tax, the display shows a deficit and "□". To compensate for the deficit, make an additional amount-tendered entry or make a charge entry.
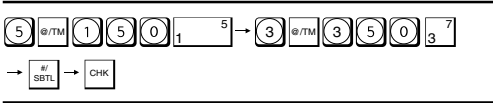
Department

Repetitive Department Entries

To enter two or more of the same item, press the appropriate department key repeatedly.

Multiplication Entries

To enter a sale of two or more of the same item, use [@/TM] key for multiplication.
Example: Selling five pieces of $1.50 item (department 1) and three pieces of $3.50 item (department 3) for check payment.

[5] [@/TM] [1] [5] [0] [1] [→] [3] [@/TM] [3] [5] [0] [3] [→] [#/SBTL] [→] [CHK]

Single Item Cash Sale (SICS) Entry

This function is used for the sale of one item to be paid by cash. It is applicable only to departments programmed for single-item cash sales or to PLUs associated with such departments. After the appropriate department or [PLU] key is pressed, the transaction is complete and the drawer opens. For the programming of SICS, see the Department Status section in "Programming."

PLU(Price Look Up)

The PLU function allows speedy key entries. When a PLU code has been assigned to an item and a price for it has been programmed, entry of the code automatically calls up the price for the item. Up to 80 PLU codes are programmable. See the PLU programming section in "Programming"

To enter a sale of a PLU item, simply enter its code and press [PLU].

Tax Calculation

Automatic Tax Calculation

When the register is programmed with a tax table or tax rate method and the tax status of a department is programmed as taxable, the register automatically computes the tax on any item entered using the department key for that department or a PLU code associated with that department.

Taxable Subtotal

You can display the taxable 1 or taxable 2 subtotal by pressing either tax shift key and then [#/SBTL]. The subtotal of taxable 1 or taxable 2 entries is displayed. You cannot display the subtotal of taxable 3 or 4 items.

Tax Shift

You can change the programmed taxable 1 or 2 status of each department key by pressing one or both of the two tax shift keys [TAX1 SHIFT/RA] and [TAX2 SHIFT/PO]. To change the taxable status, press the appropriate tax shift key just before the department, [PLU] or [%] key. In case of repetitive entries, the shifted tax status is used.
NOTE: Any entry that causes two or more kinds of PST or GST to be imposed on sale of an item is prohibited.

Tax Delete

This function is used when the taxable item or items once entered need to be made non-taxable. Press [TAX1 SHIFT/RA] or [TAX2 SHIFT/PO], then [#/SBTL], and [VOID] and all entries made so far in the transaction for items with the specified taxable status will be made non-taxable.

To make all entries up to that point non-taxable, press [TAX1 SHIFT/RA] and [TAX2 SHIFT/PO], then [#/SBTL], and [VOID]. Subsequent entries in the transaction remain unaffected and will be taxed normally.

Manual Tax

You can apply tax manually when the automatic tax calculation function cannot be used. Each manual tax entry (for Tax 1 or Tax 2) can be made only once during a transaction. After a manual tax entry, you cannot make any further item entries.

Manual tax 1 entry:
[TAX1 SHIFT/RA] and [#/SBTL] → tax amount → [#/SBTL]

Manual tax 2 entry:
[TAX2 SHIFT/PO] and [#/SBTL] → tax amount → [#/SBTL]

Opening the Drawer with No Sale

Just press [CA/AT/NS] and the drawer opens.

Percent Key

The percent key is used to apply a discount or premium to an item or to a subtotal.
You can manually enter a discount (or premium) rate. Once the rate is preset for [%], you can skip the step of entering the rate.

Discount for an item:
entry of an item → percentage rate → [%]
(ex. For 20%, enter [2] [0] [0] [0].)

Discount for a subtotal:
entry of all items → [#/SBTL] → percentage rate → [%]
(ex. For 5%, enter [5] [0] [0].)

Entering a Refund

The cash register has no refund key. You must use the following alternative method to make a refund entry: A negative department for refund must be programmed in advance. Check the taxable status of the returned item is the same as that of the programmed negative department. If not, use the appropriate tax shift key to change the taxable status.

Procedure
unit price of the returned item → negative dept. key → [CA/AT/NS] or [CH].

Non-add Code Number

Non-add code numbers can be entered and printed on the journal (or receipt) during the entry of a sale. Non-add codes can be used for credit numbers, check numbers, serial numbers, product codes, service charge codes or any other numbers for reference to specific transactions.

Non-add code numbers can be entered in the REG or VOID mode.

Non-add code number entry procedure:
a code number of up to 8 digits → [#/SBTL].

Received-on-Account and Paid-Out Entries

The received-on-account (RA) entry function is used for entering the cash received not directly connected with a sale. The paid-out (PO) entry function is used for recording the money taken from the drawer for payment not directly connected with a sale. These functions are available in the X/F mode.

Received-on-account entry (X/F mode):
amount received (up to $799999.99) → [TAX1 SHIFT/RA]

Paid-out entry (X/F mode):
amount paid out (up to $799999.99) → [TAX2 SHIFT/PO].

When an Error Occurs

When your register goes into an error mode, it will display the error symbol "E" accompanied with a warning beep. Clear the error state by pressing the [CL] key and take the appropriate action.

1. **You have entered a number of more than 7 digits for the department price or a number larger than 79999999 (8 digits) for other amounts.**
   Press [CL] and re-enter a correct number.
2. **You have made an error in key operation:**
   Press [CL] and operate keys correctly.
3. **You have made an entry beyond a programmed entry digit limit:**
   Press [CL] and check if the entered amount is correct. If not correct, re-enter a correct number. If correct, check the setting of the entry digit limit.
4. **A subtotal exceeds 79999999 (eight digits):**
   Press [CL] and then press [CA/AT/NS], [CH] or [CHK] to finish the transaction.
5. **The number of an item exceeds 3 digits in multiplication entry:**
   Press [CL] and re-enter the correct number.

Error Escape Function

When an error or something uncontrollable occurs during a transaction entry and you cannot keep the customer waiting, press [ESC] twice (following [CL] when in the error state). You can escape the situation and finalize the transaction as a cash sale at that time. Transaction entries to that point are registered.


Part Names and Functions

Printer cover
Display
Keyboard
Mode switch
Drawer
Drawer lock
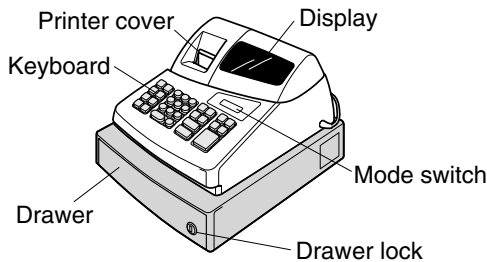
Mode Switch

The mode switch enables the register to perform a variety of functions. Mode switch settings are made by sliding the switch .
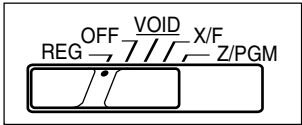
OFF   VOID   X/F
REG   Z/PGM

You can select the following functions:

REG: Permits transaction entries.
OFF: Turns the display off.
VOID: Permits you to cancel transaction entries.
X/F: Permits printing of sales reports and displaying of flash reports.
Z/PGM: Permits printing of sales reports, resetting of sales data and programming.
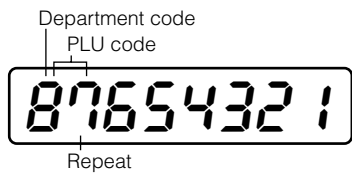
Keyboard Layout
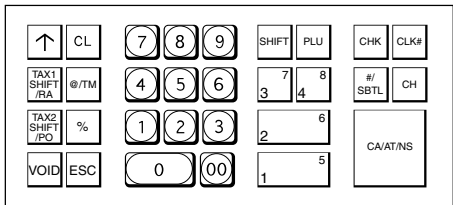
NOTE In order to enter the departments 5 to 8, press [SHIFT] and then the [1] to [4] keys.

Display

The XE-A101 is equipped with a front LED (Light-Emitting Diode) display that affords easy visibility during transactions.

Symbols and figures appearing on the display:

Department code
PLU code

8 7 6 5 4 3 2 1

Repeat

Departments/PLU Code: The department code or PLU code entered appears on the left. For example, if the key for department 1 is pressed, "$\mathit{1}$" will appear in the extreme left position.

Repeat: Indicates the number of times the same department key is pressed. If an entry is repeated more than ten times, only the first digit is displayed (12 is displayed as "$\mathit{2}$".)

(E) **Error:** This symbol appears, accompanied by a warning beep, when an error is made. If this occurs during a transaction because of an excessive digit entry, simply press [CL] and re-enter correctly.
(P) **Program:** This symbol remains on the display when the cash register is being programmed in the Z/PGM mode.
(F) **Finalization:** This symbol appears when a transaction is finalized by pressing [CA/AT/NS], [CH] or [CHK].
($\Box$) **Subtotal:** This symbol appears when [#/SBTL] is pressed and the cash register computes the subtotal, and also when the amount tendered is less than the total sale amount.
(C) **Change:** This symbol appears whenever the change due amount is displayed.
(L) **Low battery:** This symbol appears when the power of the installed batteries is below a certain level or you need to replace the batteries with new ones. (see the "Maintenance" section for explanation.)
($\Box$) **No battery:** This symbol appears when no batteries are installed. (see "Maintenance" and "Getting Started" sections for explanation.)

In addition, the following appear when appropriate:
• The minus sign (−) can appear in positions 2 to 8.
• The decimal point appears in positions 1 to 3.
• When entry of the secret code is necessary, "− − − −" appears in positions 1 to 4 .

Reading and Resetting of Sales

X Reports

This report, when taken in the X/F mode, prints the accumulated information of sales. Taking an X report is a good way to do a mid-day check on daily sales. You can take X reports any number of times, because they do not affect the cash register's memory.
To issue an X report, set the mode switch to the X/F position and press [CA/AT/NS].

Z Reports

The contents of Z reports are the same as those of X reports, but issuance of a Z report resets all the transaction totals to zero. To issue a Z report, set the mode switch to the Z/PGM position.

NOTE If the secret code is programmed, you must enter the secret code and press [CA/AT/NS] after this step.

For Z reports without grand total resetting
Press [CA/AT/NS].

NOTE If the secret code is programmed, you have to enter the secret code and press [CA/AT/NS] again after this step.

For Z reports with grand total resetting
If you want to reset the grand total(GT) when taking the Z report, press [CH] instead of [CA/AT/NS].
Except resetting the grand total, this report is the same as the normal Z reports.

NOTE If the secret code is programmed, you have to enter the secret code and press [CH] again after this step.

Flash Reports (displayed but not printed)

Press the following key in the X/F mode:
| Department Total | Department key |
| Sales Total | [#/SBTL] |
| Cash in Drawer | [CH] |

X/Z Report Sample

0001 Z	Reset counter
000000	Reset symbol ("X" is printed in the case of X reports.)
0657•18 1st	
27 ⓐ	Grand total
549•73 1	Quantity
3 ⓐ	Dept. code
24•00 2	Amount
4 ⓐ	
69•00 3	
35 ⓐ	All Depts. counter and total
625•68	
1 ⓐ	Percent counter and total
−2•00 x	
1 ⓐ	Item void counter and total
7•00 1 VD	
3 ⓐ	Void mode counter and total
27•03 2 VD	
575•68 st	Taxable 1 total
31•50 1 TX	Tax 1 total
0•00 st	Taxable 2 total
0•00 2 TX	Tax 2 total
0•00 st	Taxable 3 total
0•00 3 TX	Tax 3 total
0•00 st	Taxable 4 total
0•00 4 TX	Tax 4 total
26	Count of transactions
657•18 st	Sales total
490•76 CA	Cash sale total
2	Check sale counter and total
65•72 CK	
2	Charge sale counter and total
100•70 CH	
80•00 RA	Received-on-account total
30•00 PO	Paid-out total
2 #	No sale counter
540•76 #	Cash in drawer
1 #	Clerk 1 sale total
331•00	
2 #	Clerk 2 sale total
117•56	
3 #	Clerk 3 sale total
156•78	
4 #	Clerk 4 sale total
51•84	
4 #	
03-16-02	
0052#11-47	

Programming

Before you begin programming, set the mode switch to the Z/PGM position.
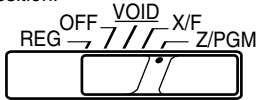
Follow these steps as needed.

NOTE If you do not press the [#/SBTL] key at the end of each programming step, you can continue programming without printing the programming report.

Programming by Departments

Preset Unit Price
The preset unit price function assigns a frequently purchased item to a department key and enables you to enter the price simply by pressing the department key. Specify a price using the following sequence:

Unit Price (Max. 5 digits) → Dept. key (→ [#/SBTL])

Department Status
You can specify various status parameters (+/- sign, single item cash sale function, taxable status and entry digit limit) for a department key. Use the following sequence:

ABCDEFG→ [@/TM] → Dept. key (→ [#/SBTL])

where A to G represent the following choices.
A: Choice of + or - sign
  Enter 0 for + or 1 for -.
B: Choice of single item cash sale (SICS) function
  Enter 0 for normal or 1 for single item cash sale.
C, D, E and F: Choice of taxable status
  Enter 0000 for non-taxable, 0001 for taxable 1, 0010 for taxable 2, 0100 for taxable 3, 1000 for taxable 4 or 1001 for taxable 1 and 4.
G: Entry digit limit (0 to 7 digits)
  Enter 0, 1, 2, 3, 4, 5, 6 or 7.

Example: Setting department 1 for positive department, normal department (not SICS), tax 4 GST, tax 1 PST, entry digit limt 7 digits.
(ABCDEFG = 0010017. Leading zeros (AB) can be omitted.)

[1][0][0][1][7] [@/TM] [1⌐⁵] ([#/SBTL])

NOTE: Any entry that causes two or more kinds of PST or GST to be imposed on sale of an item is prohibited.

PLU (Price Look-Up) Programming

Each PLU is associated to a department and the programmed contents for the department are automatically applied. Your cash register is pre-programmed so PLU codes 1-10 are assigned to department 1 and PLU codes 11-80 are disabled. To set the price or change the associated department, use the following sequence:

PLU code → [PLU] → Price → Dept. key (→ [#/SBTL])

Ex.: [1][PLU] [8][9][5] [2⌐⁶] ([#/SBTL])
  PLU code   Price   Associated dept.

To disable a PLU code, use the following sequence:
PLU code → [PLU] → [VOID] (→ [#/SBTL])

Tax Programming

Selecting the Tax Calculation System
As you know, Canada has two types of tax program: GST (Goods and Service Tax) and PST (Provincial Sales Tax). Two or more kinds of PST or GST are not levied on a single item. However, a combination of GST and PST is allowed. Typically, in this cash register, tax on fast food, liquors or room charges is assigned as taxable 1 or 2 while GST is assigned as taxable 4. Either PST or GST is assigned as taxable 3.

You must select one among the eleven types of tax calculation system listed below depending on your province and the type of your retail business. These types represent different combinations of taxation methods. There are mainly two types of taxation methods (VAT or Add on Tax) and two for PST (tax on base or tax on tax). Whether to use the "tax on tax" system or the "tax on base" system as the taxation method varies from province to province. Contact your local tax office for further sales tax information.

	Tax 4 Method	Tax 3 Method		Tax 2,1 Method
	GST	GST	PST	PST
Type 1	VAT	VAT	-	Tax on tax
Type 2	VAT	VAT	-	Tax on base
Type 3	VAT	-	Tax on tax	Tax on tax
Type 4	VAT	-	Tax on base	Tax on tax
Type 5	Add on Tax	-	Tax on tax	Tax on tax
Type 6	Add on Tax	-	Tax on base	Tax on tax
Type 7	Add on Tax	VAT	-	Tax on tax
Type 8	Add on Tax	VAT	-	Tax on base
Type 9	Add on Tax	Add on Tax	-	Tax on tax
Type 10	Add on Tax	Add on Tax	-	Tax on tax
Type 11	VAT	-	VAT(Tax on base)	Tax on tax

Example: Selecting tax calculation system type 6 (most common type for Canada)

[7] → [#/SBTL] → [6] → [CA/AT/NS]
  Tax Type number (6)

Tax Table Programming
If you are in an area that uses a tax table for tax calculation, you can program the cash register accordingly.
Tax table programming can be performed for Tax 1 and Tax 2.

Sample tax table 1 (6%):

Tax	Breakpoint	Breakpoint difference	
.00	.01	.10	Non-cyclic
.01	.11		
.02	.23	.12	
.03	.39	.16	
.04	.57	.18	Cyclic I
.05	.73	.16	
.06	.89	.16	
.07	1.11	.22	
.08	1.23	.12	
.09	1.39	.16	
.10	1.57	.18	Cyclic II
.11	1.73	.16	
.12	1.89	.16	
.13	2.11	.22	

Sample tax table 2:

Tax	Breakpoint
.00	.01
.01	.11
.02	.26
.03	.47
.04	.68
.06	.89
.09	1.11
.10	1.26
.11	1.47
.12	1.68
.14	1.89
.17	2.11

NOTE If tax is not shown for every cent, use the breakpoint of the next highest tax amount for each missing breakpoint. In sample tax table 2, tax is not shown for .05, .07, .08, .13, .15 and .16. Likewise, the corresponding breakpoints are not shown. To complete the table, simply insert the next highest breakpoint after each missing figure. Therefore, the breakpoint for .05 would be .89, .07 and .08 would be 1.11, etc.

Use the following sequence for tax programming:

[8] → [#/SBTL] → [1] for Tax 1 or [2] for Tax 2 → [@/TM] →
R → [@/TM] → M → [@/TM] → Q → [@/TM] → Breakpoint →
[CA/AT/NS]

where R, M and Q represent the following:
R: Tax rate (0.0000% to 99.9999%) x 10000
If the rate is fractional, it should be converted to its decimal equivalent before entering.

M: Cycle (0.01 to 99.99) x 100
In tax table 1, you can see that the breakpoint differences repeat in cycle. The value of M may be viewed as the taxable amount which is covered by a cycle. Thus, it can be determined by adding all of the breakpoint differences in a cycle or by simply taking the difference between the first breakpoint of the cycle and the first breakpoint of the next cycle.
Q: Minimum taxable amount (0.01 to 99.99) x 100
This represents the smallest amount for which tax must be collected. In some states, sales whose amounts are less than a specific minimum taxable amount are not subject to taxation.
Breakpoints (0.01 to 99.99) x 100
The tax amount increases in stages. The value of a taxable subtotal at which the tax amount changes is called a breakpoint. The difference between one breakpoint and the next is called the breakpoint difference. A group of breakpoint differences is repeated at regular intervals and each of these intervals is called a cycle. A maximum of 18 breakpoints (for tax types 1 and 2), between 0.01 to 99.99, can be programmed. Intervals between breakpoints must be less than one dollar.

Example: Programmig Tax 1 as 6% sales tax using sample tax table 1.

[8] [#/SBTL] [1] [@/TM] [6][0][0][0][0] [@/TM] [1][0][0]
  Tax 1   Tax rate (R)   Cycle (M)

[@/TM] [1][1] [@/TM] [2][3] [@/TM] [3][9] [@/TM] [5][7]
Minimum taxable Breakpoint Breakpoint Breakpoint
amount (Q)
(First breakpoint)

[@/TM] [7][3] [@/TM] [8][9] [@/TM] [1][1][1] [CA/AT/NS]
  Breakpoint   Breakpoint   Breakpoint
                          (First breakpoint of the next cycle)

Programming the Percent key

Percent Key Function
The [%] key can be programmed as a discount key or as a premium key. The taxable status of the [%] key can also be programmed though it is pre-programmed as a non-taxable discount key. Use the following sequence:

ABCDE → [@/TM] → [%] (→ [#/SBTL])

where A to E represent the following choices
A: Choice of + or - sign
  Enter 0 for + or 1 for - .
B, C, D and E: Choice of taxable status
  Enter 0000 for non-taxable, 0001 for taxable 1, 0010 for taxable 2, 0100 for taxable 3, 1000 for taxable 4 or 1001 for taxable 1 and 4.

Initial setting: - (discount), non-taxable ("10000")

eg. to set % disc to tax only the discounted item(s) enter job: 11111 [@/TM] [%] [SBTL]

Programming the percent rate
Use the following sequence:

Percent rate (0.01% to 99.99%) → [%] (→ [#/SBTL])

(ex. For 10.00% enter [1][0][0][0] [%] [#/SBTL].)

Initial setting: 0.00(%)

Printing Format

You can choose either a journal or receipt format and specify other options for the printing format. Use the following sequence:

[2] → [#/SBTL] → ABCDEFG → [#/SBTL] (→ [#/SBTL])

A: Printing journal/receipt in the REG mode
  Enter 0 for printing or 1 for no printing.
B: Journal or receipt format
  Enter 0 for journal format or 1 for receipt format.
  (In the receipt format, the paper is fed by a few lines upon finalization of each transaction. In the journal format, the paper is wound around the take-up spool.)
C: Printing date
  Enter 0 to print or 1 not to print.
D: Printing time
  Enter 0 to print or 1 not to print.
E: Printing consecutive numbers
  Enter 0 to print or 1 not to print.
F: Printing taxable subtotal
  Enter 0 to print or 1 not to print.
G: Printing merchandise subtotal with [#/SBTL]
  Enter 0 to print or 1 not to print.

Initial setting: printing in the REG mode, journal format, printing date, time and consecutive number, and not printing taxable subtotal and merchandise subtotal ("0000011")

Consecutive Receipt Number

A consecutive receipt number can be printed on every transaction or receipt and report with the date and number. Use the following sequence to set the receipt start number. To start from a specific number, enter the number less one (e.g. if you want to start from receipt number 1001, enter 1000).

Consecutive (receipt) number → [@/TM] → [#/SBTL] (→ [#/SBTL])
Initial setting: starting from 0001("0000")

Miscellaneous Settings

You can program miscellaneous settings using the following sequence:

[1] → [#/SBTL] → ABCDEFGH → [#/SBTL] (→ [#/SBTL])

where A, B, C, D, E, F, G and H represent the following choices.
A: Date format
  Enter 0 for mmddyy, 1 for ddmmyy or 2 for yymmdd.
B: Time format
  Enter 0 for 12 hour system or 1 for 24 hour system.
C: Decimal point setting
  Enter 0, 1, 2 or 3 for the decimal point position.
D: Resetting receipt no. when issuing Z report
  Enter 0 to not reset or 1 to reset
E: Amount tendered compulsory
  Enter 0 for non compulsory or 1 for compulsory.
F: Choice of [#/SBTL] **compulsory**
  Enter 0 for non compulsory or 1 for compulsory.
G: Entry digit limit for [CL], [CLK], [TAX1 SHIFT], [TAX2 SHIFT] **and manual tax**
  Enter 0, 1, 2, 3, 4, 5, 6, 7 or 8 for the entry digit limit.
H: Rounding
  Enter 0 for rounding off, 1 for rounding up or 2 for rounding down

Initial setting: date format "mmddyy", time format "12 hour system", decimal point position "2", not resetting, amount tendered non compulsory, [#/SBTL] non compulsory, entry digit limit "8" and rounding off ("00200080")

Secret Code

A secret code can be specified so that only those who know the secret code may issue Z reports for reading and resetting of sales, perform programming in the Z/PGM mode and void operation in the VOID mode. The pre-programmed secret code setting is 0000 (no secret code). Use the following sequence to enter a secret code (4 digits).

Secret code → [@/TM] → [CA/AT/NS]

The secret code function can be disabled by entering [0][0][0][0] (or nothing) for the code in the above sequence.

When entry of secret code is necessary, "----" is displayed. Each time you enter a number for the secret code, the corresponding symbol "-" changes to "_".

Checking the Machine Settings

To obtain a printout that shows the cash register settings, set the mode switch to the Z/PGM position and use the following sequence:

General & Tax Settings
To see the general and tax settings, set the mode switch to the Z/PGM position and press [#/SBTL].

```
000017 1       — Taxable status
8•95           — Dept. code
100016 2       — Sign and unit price
6•00
100016 2       — Entry digit limit
10•00
000016 4       — SICS (1) / Normal (0)
-0•00

0001    %      — Taxable status for [%]
-8•00          — Sign and rate for [%]
#1234          — Secret code
00200080#1     — Miscellaneous settings
0000011#2      — Printing format
06#7           — Tax calculation system
6•0000 1π
1•00
1  0•11
2  0•23
3  0•39
4  0•57        — Tax table(Tax1)
5  0•73
6  0•89
7  1•11
7•0000 2π      — Percentage tax rate(Tax2)
0•11           — Minimum taxable amount
0•0000 3π
0•00
0•0000 4π
0•00
    4 #         — Clerk code
03-16-02       — Date
0057#12-08ª    — Time / Receipt number
```

PLU Settings
To see the PLU settings, set the mode switch to the Z/PGM position and press [PLU].

```
#01            — PLU code
8•95 2         — Associated department
#02            — Unit price
4•50 1
#03
3•00 2
#04
4•00 1
```

Correction

Correction of an Entered Number
When you enter an incorrect number, delete it by pressing [CL] immediately after the entry.

Correction of the Last Entry
If you make a mistake when making a department entry, PLU entry, repetitive or multiplication entry, discount or premium entry by [%], or manual tax entry, you can correct this by pressing [VOID].

Correction of Earlier Entries
You can correct any incorrect entry made during a transaction if you find it before finalizing the transaction by pressing [CA/AT/NS], [CH], [CHK], etc.
For example, to correct [3][PLU] entry to [4][PLU] after another correct entry has been made, enter the following:

[3] [PLU] [1][1][5][0] [1⌐⁵] [3] [VOID] [PLU]

[4] [PLU] [CA/AT/NS]

Void Mode
This function allows you to reverse the entries made in an incorrect receipt. The entries are subtracted from each totalizer and added to a void totalizer.

To use this function, set the mode switch to the VOID position and enter the same details that are on the incorrect receipt. The VOID mode symbol(VD) is printed at the bottom of the receipt.

NOTE If the secret code is programmed, you have to enter the secret code and press [CA/AT/NS] after setting the mode switch to the VOID position.

Void Operation in the X/F Mode
Received-on-account(RA) and paid-out(PO) entries can be corrected in the X/F mode.

Void operation for RA(X/F mode)
[VOID]* → amount → [TAX1 SHIFT RA]

Void operation for PO(X/F mode)
[VOID]* → amount → [TAX2 SHIFT PO]

*If the secret code is programmed, you have to enter the secret code here and press [VOID] again before entering the amount and pressing [TAX1 SHIFT RA] or [TAX2 SHIFT PO].

Maintenance

Batteries

This cash register provides a low battery symbol (L) and a no battery symbol (L) which appears on the far left of the display in one of the following situations:

Low battery symbol (L)
• When less than 3 batteries are installed in the cash register.
• When the voltage of the batteries installed in the cash register is under the required level.

No battery symbol (L)
• When no batteries are installed in the cash register.
• When the batteries installed in the cash register are dead.

When either of these symbols appear, check batteries. If no batteries are installed, install three new "AA" batteries at once. If batteries are already installed, replace them with new ones as soon as possible. If the AC power cord is disconnected or a power failure occurs when the batteries are dead or not installed, all the programmed settings will be reset to the default settings and any data stored in memory will be cleared.

> **NOTE** If the low battery symbol appears while making a transaction, complete the transaction before replacing the batteries.

Replacement

1. Be sure the cash register is plugged in.

2. Set the mode switch to the REG position.

3. Pull the printer cover upward and detach it.
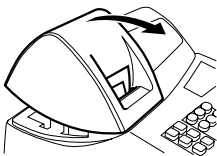
4. Open the battery cover and remove the old batteries.
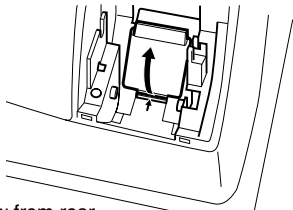
View from rear

5. Install three new "AA" batteries into the battery compartment.
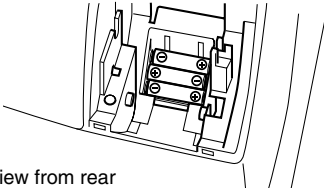
View from rear

6. Check that the "L" symbol has disappeared.

7. Close the battery cover.

8. Replace the printer cover.

> ⚠ Improper use of batteries could cause them to burst or leak, which might damage the interior of the machine. See the cautions in the "Getting Started" section.
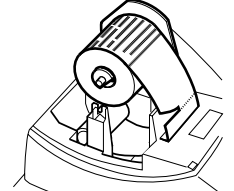
Paper Roll

When colored dye appears on the edges of the paper roll, it is time to replace the roll. Use paper of 2 1/4" (57 mm) in width. To prevent jamming be sure to use paper specified by SHARP.
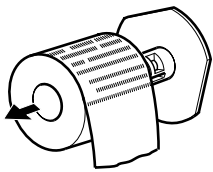
Replacement (Journal printing)

1. Set the mode switch to the REG position.

2. Open the printer cover.

3. Press ↑ to advance the paper several lines. Remove the take-up spool from the bearing.
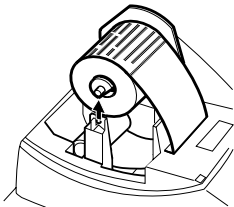
4. After cutting the existing paper, remove the paper roll. Then remove the remaining paper by pressing ↑.

5. Remove the used journal paper roll (if used) from the take-up spool.

6. Install a new paper roll and the take-up spool according to the instructions in "Getting Started."
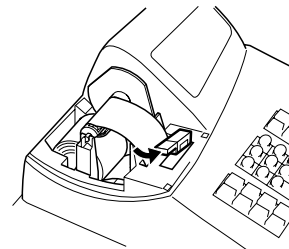
> ⚠ In the case of receipt printing, steps 3 and 5 should be omitted and the take-up spool need not be installed in step 6.

Replacing the Ink Roller

1. Open the printer cover.

2. Remove the ink roller by pulling it upward.
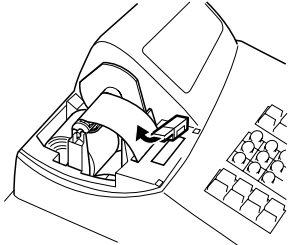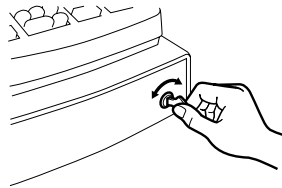

3. Install a new ink roller.

4. Close the printer cover.
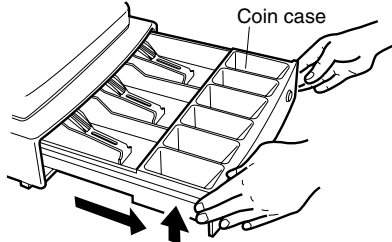
Drawer Handling

Locking the Drawer

Develop the habit of locking the drawer when not using the register for any extended period of time.

To lock: Insert the key into the drawer lock and turn it 90 degrees counter-clockwise.
To unlock: Insert the key into the drawer lock and turn it 90 degrees clockwise.


Removing the Drawer

To remove the drawer, pull it out and lift it up.

Coin case

> **NOTE**
> • To prevent burglary, it is a good idea to empty the drawer after work and leave it open at the end of the day.
> • Coin case is detachable.

Manually Opening the Drawer

In case of a power failure or if the machine is out of order, locate the lever at the bottom of the machine and move it in the direction of the arrow to open the drawer. The drawer will not open if it is locked with the drawer lock key.
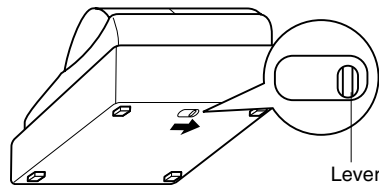
Lever

In Case of a Power Failure or Paper Jam

The following situations may arise during a power failure or paper jam. (Make sure that batteries are correctly installed.) As the power is recovered or a paper jam is removed, the register will resume normal operation with a next key operation.

When a power failure occurs with the register turned on or during a computation process:
Upon power recovery, the register resumes operation from the point of failure.

**When a power failure occurs during printing of transaction data:**
Upon power recovery, the register prints "###########" and resumes printing of the transaction data.

When a power failure occurs during printing of an X (reading) or Z (reading and resetting) report:
Upon power recovery, the register prints "###########" and resumes printing of the report.

12•00 1	
•00 ST	Before power failure
###########	Power failure mark
12•00 ST	
0•72 1 TL	
12•72 CA	After power failure
1 #	
03-16-02	
1003#11-38ⓐ	

When the printer motor is locked due to a paper jam:
Printing stops and intermittent beeping starts. First, unplug the power cord and clear the paper jam. Then plug in the power cord, feed the roll paper to the proper position and press ⌑. The register will then resume printing after printing "###########".

Before Calling for Service

If you encounter any of the following problems, please read below before calling for service.

The display shows symbols that do not make sense.
• Has the machine been initialized properly as shown in "Getting Started"?

The display will not illuminate while the machine is turned on. The machine will not operate when any key is pressed.
• Is the power supplied to the electrical outlet? (Plug another electrical device into the outlet for confirmation.)
• Is the power cord firmly connected to the electrical outlet?

The display is illuminated, but the machine will not accept key entries.
• Is the mode switch properly set to the REG position?
• Has the machine been initialized properly as shown in "Getting Started"?

Journal paper will not feed properly in the printer.
• Is the take-up spool installed properly?
• Is there a paper jam?
• Is the journal format selected in the printing format programming?
 (If the receipt format is selected, the paper is not wound around the take-up spool.)

Printing is faded or illegible.
• Is the ink roller used up?
• Has the ink roller been installed properly?

Specifications

Model:
XE-A101

Size:
Inches: 13.0 (W) x 14.3 (D) x 9.96 (H)
Millimeters: 330 (W) x 363 (D) x 253 (H)

Weight:
Approx. 11.0 lbs. (5.0 kg)

Power Source:
Local voltage ±10% AC, 50/60Hz

Power Consumption:
Stand-by: 4 W, Operating: 12.5 W

Working Temperature:
32 to 104˚F (0 to 40˚C)

Display:
LED (Light-Emitting Diode) numeric display

Printer:
1 station, print wheel selective type

Printing Capacity:
Max. 13 characters

Paper Roll:
Width: 2 1/4" ± 1/64" (57.5mm ± 0.5mm)
Max. external diameter: 3-5/32" (80mm)
Min. internal diameter: 15/32" (12mm)

Cash Drawer:
3 slots for bills, 6 for coins

Accessories (supplied):
Paper roll: 1 roll
Drawer lock key: 2
Instruction manual (English): 1 copy
Instruction manual (French): 1 copy
Quick Start Guide (English): 1 copy
Quick Start Guide (French): 1 copy
Limited Warranty: 1 copy
Ink roller: 1 (installed)
Take-up spool: 1

• Specifications and appearance are subject to change without notice for improvement.

SHARP

SHARP CORPORATION