

WARNING – FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

SHARP CORPORATION

PRINTED IN CHINA / IMPRESO EN CHINA
04GT(TINSZ0774EHZZ)

OPERATIONAL NOTES

- To insure trouble-free operation of your SHARP calculator, we recommend the following:
- The calculator should be kept in areas free from extreme temperature changes, moisture, and dust.
 - A soft, dry cloth should be used to clean the calculator. Do not use solvents or a wet cloth.
 - Since this product is not waterproof, do not use it or store it where fluids, for example water, can splash onto it. Raindrops, water spray, juice, coffee, steam, perspiration, etc. will also cause malfunction.
 - If service should be required, use only a SHARP servicing dealer, a SHARP approved service facility or SHARP repair service.
 - Do not operate the unit with the battery insulation sheet attached. The battery insulation sheet prevents the memory protection battery from wearing, and is found on the back of the unit. Operating with the battery insulation sheet attached may result to loss of information such as date and time, conversion rate, and tax/discount rate if the AC power plug is accidentally pulled out from the wall socket.
 - Do not wind the AC cord around the body or otherwise forcibly bend or twist it.

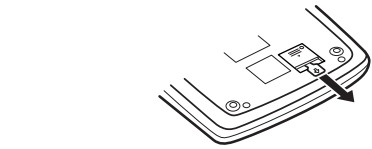
SHARP will not be liable nor responsible for any incidental or consequential economic or property damage caused by misuse and/or malfunctions of this product and its peripherals, unless such liability is acknowledged by law.

USING THE CALCULATOR FOR THE FIRST TIME

First, pull out the insulation sheet for the memory protection battery (installed for retaining the date/time, conversion rate, and tax/discount rate information). Reset the calculator to initialize the unit's state, then adjust the date and time.

Removing the insulation sheet, and resetting

- Pull out the insulation sheet for the memory protection battery.



- Press the RESET switch located on the back of the unit. (See "RESETTING THE UNIT.")
- * The clock starts, indicating the current date and time as January 1, 2005, 12:00:00 a.m.

Adjusting date and time

Example: When the date is September 15, 2004, and the time is 3:38 p.m.

Operation	Display
9 15 2004	9-15-2004
15 38	3-38 00 P
	0.

(see "GRAND TOTAL / RATESETTING MODE SELECTOR")

* When the adjustment is complete, the clock starts at 3:38:00 p.m.

OPERATING CONTROLS

POWER SWITCH; PRINT / ITEM COUNT MODE SELECTOR:

"OFF": Power off.
"•": Power ON. Set to the non-print mode.
"P": Power ON. Set to the print mode.
"P-IC": Power ON. Set to the print and item count mode.

- The counter will count the number of times that the key has been pressed in addition.
Note: • Each time the key is used in subtraction, 1 will be subtracted from the count.

- The count is printed when the calculated result is obtained.
- Pressing of the , , , or key clears the counter.

- When the grand total/rate setting mode selector is in the ON position (GT), the counter will count the number of times that the calculation results have been stored in the grand total memory. To print and clear the count, press the key.
- The memory item counter will count the number of times that the key has been pressed in the addition.

Note: • Each time the key is used in the subtraction, 1 will be subtracted from the count.

- The count is printed when the memory is recalled.
- Pressing of the key clears the counter.

Note: The counter has a maximum capacity of 3 digits (up to ±999). If the count exceeds the maximum, the counter will recount from zero.

F 6 3 2 1 0

DECIMAL SELECTOR:

Presets the number of decimal places in the answer. In the "F" position, the answer is displayed in the floating decimal system.

K • A

CONSTANT/ADD MODE SELECTOR:

"K": The following constant functions will be performed:

Multiplication:

The calculator will automatically remember the first number entered (the multiplicand) and instruction.

Division:

The calculator will automatically remember the second number entered (the divisor) and instruction.

"•": Neutral

"A": Using the Add mode permits addition and subtraction of numbers without an entry of the decimal point. When the Add mode is activated, the decimal point is automatically positioned according to the decimal selector setting.

Use of , and will automatically override the Add mode and decimally correct answers will be printed at the preset decimal position.

↑ 5/4 ↓

ROUNDING SELECTOR:

- "↑": An answer is rounded up.
- "5/4": An answer is rounded off.
- "↓": An answer is rounded down.

Note: The decimal point floats during successive calculation by the use of or .

If the decimal selector is set to "F" then the answer is always rounded down (↓).

RATE

GT • SET

GRAND TOTAL/RATE SETTING MODE SELECTOR:

- "GT": Grand Total
- "•": Neutral
- "RATE": To set up date, time, conversion rate, and tax/discount rate, place the switch at the "RATE SET" position.

- Date:**
 - Enter in the order of month, day and year, then press to complete the entry.
 - Use to separate month, day, and year.
 - When is pressed, the number entered is evaluated and displayed as "date" if the value is within the following range: "Error" is displayed otherwise, and the previously set date is restored.
- Month: 1 - 12; day: 1 - 31; Year: 2000 - 2099 (in 4 digits) or 00 - 99 (in 2 digits)

- Time:**
 - Enter in the order of hour, minutes, then press to complete the entry.
 - (There is no entry available for the seconds value. The clock starts at zero second.)

- If the hour/minute digit is less than 10, it is not necessary to enter the first digit "0".
 - Use to separate hour and minute values.
 - When is pressed, the number entered is evaluated and displayed as "time" if the value is within the following range: "Error" is displayed otherwise, and the previously set time is restored.
- Hour: 0 - 23 (24-hour system for the hour entry),
Minute: 0 - 59

Conversion rate:

- Press twice, enter the conversion rate, followed by .
- A maximum of 6 digits can be stored (decimal point is not counted as a digit).

Tax / discount rate:

- Press twice, enter the tax rate, followed by .
 - Press twice, enter the discount rate, followed by then .
 - A maximum of 4 digits can be stored (decimal point is not counted as a digit).
- Note: • Be sure to set this selector to the "•" position after storing an each rate.

- For the conversion rate and the tax / discount rate, a single value can be stored for each. If you enter a new rate, the previous rate will be cleared.

TIME CALC.

TIME CALCULATION KEY:

- Utilize this key to enter hours and minutes in time calculations.
- Press this key after entering an hour or minute value. (There is no need to press this key when entering a second value.)
- To bypass hour entry, press this key after entering 0.
- To bypass minute entry, you may press this key alone, or press it after entering 0.
- When this key is pressed, if the preceding entry is in any of the following ranges, it is set as an hour or minute value:
Hour: Within 6 digits
Minute: 0 to 99 (An entry above 60 is rounded up to one hour. If a value of more than 3 digits is entered, only the least significant two digits take effect.)
- A second value is set when it is entered in the following range:
Second: 0 to 99 (An entry above 60 is rounded up to one minute. If a value of more than 3 digits is entered, only the least significant two digits take effect.)

CLCK

CLOCK / CALENDAR KEY:

- Each time this key is pressed, the mode switches. Calculation mode → Date display mode → Clock display mode → Calculation mode
- Use this key also to adjust date and time (see "GRAND TOTAL / RATE SETTING MODE SELECTOR").

RI PAPER FEED KEY

LAST DIGIT CORRECTION KEY

GT GRAND TOTAL KEY

CE CLEAR ENTRY KEY

TOTAL KEY:

Press this key twice, followed by , to print the set tax rate.

The tax rate is printed with the symbol "TX".

MULTIPLICATION KEY

DIVISION KEY

MINUS EQUAL KEY

PLUS EQUAL KEY

CHANGE SIGN KEY

MARKUP KEY

MEMORY TOTAL CLEAR KEY

MEMORY SUBTOTAL RECALL KEY

MEMORY PLUS KEY

MEMORY MINUS KEY

TAX-INCLUDING KEY

PRE-TAX KEY

PERCENT KEY

NON-ADD/SUBTOTAL KEY:

Non-add – When this key is pressed right after an entry of a number in the Print mode, the entry is printed on the left-hand side with the symbol "#".
This key is used to print out numbers not subjects to calculation such as code, date, etc.

Subtotal – Used to get subtotal(s) of additions and/or subtractions. When pressed following the or key, the subtotal is printed with the symbol "ST" and the calculation may be continued.

By pressing this key even in the Non-print mode, the displayed number is printed with the symbol "P".

- When the POWER SWITCH; PRINT / ITEM COUNT MODE SELECTOR is set "•", "P" or "P-IC" position, and Dator Clock is displayed, press this key to print the displayed contents, including "#" symbol, from the left side of the paper roll.

Example:
Date printing
#9 • 15 • 2004 • • • • •
(when the date is September 15, 2004)
Clock printing
#10 • 30 A
(when the time is 10:30 a.m.)
#6 • 25
(when the time is 6:25 p.m.)

• When the Date / Clock printing is complete, the Calculation mode is restored.

AVG

AVERAGE KEY:

Used to calculate the average.

CONVERSION KEY:

This key is used:

- to store the conversion rate (by the use of the rate setting mode selector),
- obtains a value by multiplying a given number with a specified conversion rate.
- to recall the presently stored rate for check. Press first to clear the calculation register and reset an error condition, then press . The conversion rate is printed with the symbol "TC".

CONVERSION KEY:

This key is used to obtain a value by dividing a given number with a specified conversion rate.

↑ 5/4 ↓

SELECTOR DE REDONDEO:

- "↑": El resultado es redondeado hacia arriba.
- "5/4": El resultado no es redondeado.
- "↓": El resultado es redondeado hacia abajo.

Note: El punto (= coma) decimal flota mientras se hacen cálculos sucesivos usando o .

Si el selector decimal se coloca en "F", la respuesta siempre se redondea por defecto (↓).

RATE

GT • SET

SELECTOR DEL MODO DE TOTAL GLOBAL/ FIJACIÓN DE TIPOS:

- "GT": Total Global
- "•": Neutra
- "RATE": Para establecer la fecha, la hora, la tasa de conversión, y la tasa de impuestos/descuento, ponga el selector en la posición "RATE SET".

Fecha:

- Introduzca, por este orden, el mes, el día, y el año, y después pulse para finalizar la introducción.
 - Utilice para separar el mes, el día, y el año.
 - Cuando pulse el número introducido se evaluará y visualizará como "fecha" si el valor introducido está dentro del margen; de lo contrario se visualizará "Error", y se restablecerá la fecha preestablecida.
- Mes: 1 - 12; día: 1 - 31; año: 2000 - 2099 (introduzca 4 dígitos) o 00 - 99 (introduzca 2 dígitos)

Hora:

- Introduzca, por este orden, la hora y los minutos, y después pulse para completar la introducción. (No es posible introducir los segundos. El reloj comenzará a funcionar a partir de cero segundos.)
- Si los dígitos de la hora/minutos son inferiores a 10, no será necesario introducir el primer dígito "0".

- Utilice para separar los valores de la hora y los minutos.
 - Cuando pulse el número introducido se evaluará y visualizará como "hora" si el valor está dentro de la gama; en caso contrario se visualizará "Error", y se restablecerá la hora previamente ajustada.
- Hora: 0 - 23 (sistema de 24 horas para la introducción de la hora), Minutos: 0 - 59

Tasa de conversión:

- Pulse dos veces, introduzca la tasa de conversión, seguido por .
- Se puede almacenar un máximo de 6 dígitos (la coma decimal no cuenta como un dígito).

Tasa de impuesto / descuento:

- Pulse dos veces, introduzca la tasa de impuesto, seguido por .
- Pulse dos veces, introduzca la tasa de descuento, seguido por y después .
- Se puede almacenar un máximo de 4 dígitos (la coma decimal no cuenta como un dígito).

Note: • Asegúrese de poner este selector en la posición "•" después de almacenar cada tipo.

- Se puede almacenar un tipo de cada para la conversión y el impuesto / descuento. Si introduce un tipo nuevo, el tipo anterior se borrará.

TIME CALC.

TECLA DE CÁLCULO DE TIEMPO:

- Utilice esta tecla para introducir horas y minutos en cálculos de tiempo.
- Pulse esta tecla tras introducir una valor de horas o minutos (no es necesario pulsar esta tecla cuando se introduzca un valor de segundos).
- Para pasar por alto la entrada de horas, pulse esta tecla tras introducir 0.
- Para pasar por alto la entrada de minutos, podrá pulsar esta tecla sola o tras introducir 0.
- Cuando se pulse esta tecla, si la entrada precedente se encuentra dentro de cualquiera de los rangos siguientes, ésta se establecerá como un valor de horas o minutos:
Hora: dentro de 6 dígitos
Minuto: 0 a 99 (una entrada superior a 60 se redondeará a una hora. Si se introduce un valor de más de 3 dígitos, sólo tendrán efecto los dos dígitos menos significativos).

- Se establecerá un segundo valor cuando éste se introduzca dentro del rango siguiente:
Segundo: 0 a 99 (una entrada superior a 60 se redondeará a un minuto. Si se introduce un valor de más de 3 dígitos, sólo tendrán efecto los dos dígitos menos significativos).

CLCK

TECLA DEL RELOJ / CALENDARIO:

- Cada vez que pulse esta tecla, el modo cambiará. Modo de cálculo → Modo de visualización de la fecha → Modo de visualización del reloj → Modo de cálculo
- Utilice esta tecla para ajustar también la fecha y la hora (consulte "SELECTOR DEL MODO DE TOTAL GLOBAL / FIJACIÓN DE TASA").

RI TECLA DE AVANCE DEL PAPEL

TECLA DE CORRECCIÓN DE LA ÚLTIMA CIFRA

GT TECLA DE TOTAL GLOBAL

CE TECLA DE BORRADO DE ENTRADA

TOTAL KEY:

Presione esta tecla dos veces, seguida por , para imprimir la tasa de impuestos establecida.

El tasa de impuesto se imprime con el smbolo "TX".

TECLA DE MULTIPLICACIÓN

TECLA DE DIVISIÓN

TECLA MENOS IGUAL

TECLA MÁS IGUAL

TECLA DE CAMBIO DE SIGNO

TECLA DE USO MÚLTIPLE

TECLA DE TOTAL DE MEMORIA

TECLA DE ACCESO A MEMORIA SUBTOTAL

TECLA DE SUMA EN MEMORIA

TECLA DE RESTA EN MEMORIA

TECLA DE INCLUSIÓN DE IMPUESTOS

TECLA DE ANTES DE IMPUESTOS

TECLA DE PORCENTAJE

TECLA DE NO SUMA/TOTAL PARCIAL:

No-suma – Cuando se aprieta esta tecla inmediatamente después de haber ingresado un número en el modo de impresión, el número registrado se imprime a la izquierda, junto con el símbolo "#".
Esta tecla se usa para imprimir números que no están sujetos a cálculos como, por ejemplo, códigos, fechas, etc.

Se usa para obtener uno o varios totales parciales de sumas y/o restas.

Total parcial – Cuando se aprieta a continuación de la tecla o se imprimirá el total parcial junto con el símbolo "0" pudiéndose seguir con los cálculos.

Al apretar esta tecla, incluso en el modo de no impresión, se imprimirá el número que aparece en la exhibición con el símbolo "P".

- Cuando el INTERRUPTOR DE LA ALIMENTACIÓN; SELECTOR DEL MODO DE IMPRESIÓN / MODO PARA CONTAR ARTÍCULOS esté en la posición "•" o "P" o "P-IC", y se estuviera mostrando la fecha o la hora, pulse esta tecla para imprimir el contenido visualizado, incluyendo el símbolo "#", desde el lado derecho del rollo de papel.

Ejemplo:
Impresión de la fecha
#9 • 15 • 2004 • • • • •
(cuando la fecha sea el 15 de septiembre de 2004)
Impresión del reloj
#10 • 30 A
(cuando la hora sea 10:30 a.m.)
#6 • 25
(cuando la hora sea 6:25 p.m.)

• Cuando finalice la impresión de la fecha / hora, volverá al modo decáculo.

AVG

TECLA DE PROMEDIO:

Se usa para calcular el promedio.

TECLA DE CONVERSIÓN:

Esta tecla se utiliza para:

- Almacenar el tasa de conversión (utilizando el selector del modo de fijación de tipos).
- Obtiene un valor multiplicando un número dado por una tasa de cambio especificada.
- Comprobar el tipo actualmente almacenado. Presione primero first to clear the calculation register and restaurar una condición de error, y el botón pulse . El tasa de conversión se imprime con el símbolo "TC".

TECLA DE CONVERSIÓN:

Esta tecla se utiliza para obtener un valor dividiendo un número dado por una tasa de cambio especificada.

DISPLAY SYMBOLS:

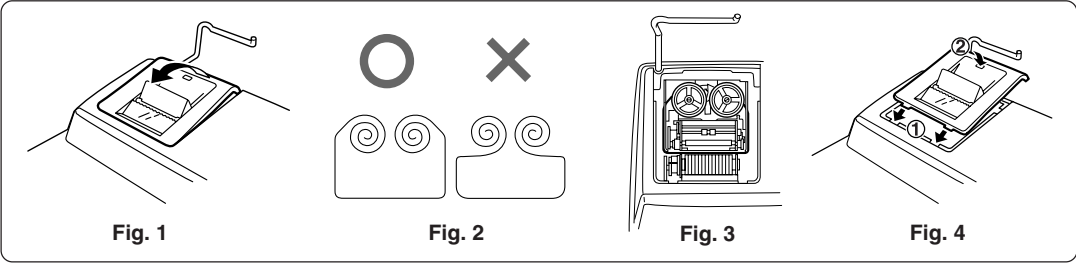
- M : A number has been stored in memory.
- : The display value is negative.
- E : Error or overflow of capacity.
- : Appears when a number is in the grand total memory.

SÍMBOLOS DEL VISUALIZADOR:

- M : Un número ha sido guardado en la memoria.
- : El valor del display es negativo.
- E : Error o desbordamiento de la capacidad.
- : Aparece cuando un número está en la memoria de total global.

INK RIBBON REPLACEMENT

- Remove the paper roll from the calculator. (Tear the paper and remove it from the print mechanism by using .
- Turn the power off before replacing ribbon.
- Remove the printer cover. (Fig. 1)
- Remove the old ribbon by pulling it up.
- Insert the new ribbon.
- With the black side of the ribbon facing upwards, place one of the reels on the reel shaft on the right. (Fig. 2) Make sure that the reel is securely in place.
- Thread the ribbon around the outside of the metal guides. (Fig. 3)
- Take up any slack by manually turning one of the reels.
- Replace the printer cover. (Fig. 4)
- Replace the paper roll.

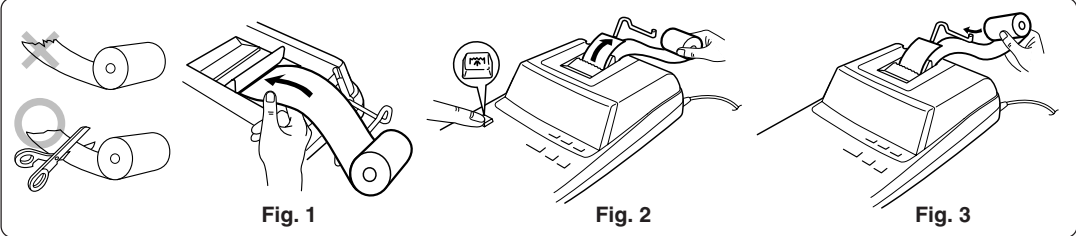


PAPER ROLL REPLACEMENT

Never insert paper roll if torn. Doing so will cause paper to jam.

Always cut leading edge with scissors first.

- Insert the leading edge of the paper roll into the opening. (Fig. 1)
- Turn the power on and feed the paper by pressing . (Fig. 2)
- Insert the paper roll to the paper holder. (Fig. 3)



DO NOT PULL PAPER BACKWARDS AS THIS MAY CAUSE DAMAGE TO PRINTING MECHANISM.

ERRORS

There are several situations which will cause an overflow or an error condition. When this occurs, "E" will be displayed. The contents of the memory at the time of the error are retained.

If an "0-E" is displayed at the time of the error, must be used to clear the calculator. If an "E" with any numerals except zero is displayed, the error may be cleared with or and the calculation can still be continued.

Also, in rare cases, printing may stop midway and the indication "E" appear on the display. This is not a malfunction but is caused when the calculator is exposed to strong electromagnetic noise or static electricity from an external source. Should this occur, press the key and then repeat the calculation from the beginning.

Error conditions:

- Entry of more than 12 digits or 11 decimals. This error can be cleared with or .
- When the integer portion of an answer exceeds 12 digits.
- When the integer portion of the contents of the memory or grand total memory exceeds 12 digits.
(Ex. 999999999999 1)
- When any number is divided by zero. (Ex. 0)

REPLACEMENT OF BATTERY FOR MEMORY PROTECTION

Time for battery replacement

Life of the memory protection battery is approximately 2,500 hours at 25°C(77°F) with the power plug not connected to the socket.

- When the memory protection battery is weak, the date/time setting is initialised (

