

SHARP®

ELECTRONIC CALCULATOR
CALCULADORA ELECTRÓNICA

ELSI MATE

EL-244W
EL-310W
EL-377W

OPERATION MANUAL

MANUAL DE MANEJO

SHARP CORPORATION

PRINTED IN CHINA / IMPRESO EN CHINA
16GSC(TINSZA161EHVT)

ENGLISH

BEFORE USE

- Do not press too hard against the LCD panel because it contains glass.
- Never dispose of the battery in a fire.
- Keep battery out of reach of children.
- Please press ON if you see no indication.
- This product, including accessories, may change due to upgrading without prior notice.
- 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.

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.

ESPAÑOL

ANTES DE USAR

- No empuje demasiado fuerte contra el panel de LCD porque contiene vidrio.
- No tire nunca las pilas al fuego.
- Guarde las pilas fuera del alcance de los niños.
- Si no ve ninguna indicación pulse ON .
- Este producto, incluyendo los accesorios, puede sufrir cambios debidos a mejoras sin previo aviso.
- Debido a que este producto no es a prueba de agua, no deberá ser utilizado o guardado en lugares donde pudiera ser salpicado por líquidos, por ejemplo agua. Gotas de lluvia, salpicaduras de agua, jugos o zumos, café, vapor, transpiración, etc. también perjudican el funcionamiento del producto.

SHARP no será responsable de ningún daño imprevisto o resultante, en lo económico o en propiedades, debido al mal uso de este producto y sus periféricos, a menos que tal responsabilidad sea reconocida por la ley.

SPECIFICATIONS

Type:	Electronic calculator
Operating capacity:	
[EL-244W/310W]	8 digits
[EL-377W]	10 digits
Power supply:	
[EL-244W/377W]	Built-in solar cell and alkaline manganese (1.5V --- (DC) LR1130 $\times$ 1)
[EL-310W]	Built-in solar cell and alkaline manganese (1.5V --- (DC) LR44 $\times$ 1)
Operating time:	
[EL-244W/377W]	Approx. 18 months
[EL-310W]	Approx. 24 months
(varies according to use and other factors)	(with 1 hour of daily use, using the alkaline battery only)
Automatic Power-off:	Approx. 7 min.
Operating temperature:	0°C - 40°C (32°F-104°F)
Dimensions:	
[EL-244W]	61 mm(W) $\times$ 104 mm(D) $\times$ 8.4 mm(H) 2-13/32"(W) $\times$ 4-3/32" (D) $\times$ 11/32"(H)
[EL-310W]	87 mm(W) $\times$ 122 mm(D) $\times$ 26.5 mm(H) 3-7/16"(W) $\times$ 4-13/16" (D) $\times$ 1-1/32"(H)
[EL-377W]	72 mm (W) $\times$ 120.5 mm(D) $\times$ 8.4 mm(H) 2-27/32"(W) $\times$ 4-3/4"(D) $\times$ 11/32"(H)
Weight(battery included):	
[EL-244W]	Approx. 46 g (0.11 lb)
[EL-310W]	Approx. 91 g (0.21 lb)
[EL-377W]	Approx. 62 g (0.14 lb)
Accessories:	Alkaline manganese battery (installed), Operation manual

ESPECIFICACIONES

Tipo:	Calculadora electrónica
Capacidad de funcionamiento:	
[EL-244W/310W]	8 dígitos
[EL-377W]	10 dígitos
Potencia:	
[EL-244W/377W]	Pila solar incorporada y pila de manganeso alcalino (1.5V --- (CC) LR1130 $\times$ 1)
[EL-310W]	Pila solar incorporada y pila de manganeso alcalino (1.5V --- (CC) LR44 $\times$ 1)
Tiempo de funcionamiento:	
[EL-244W/377W]	Aprox. 18 meses
[EL-310W]	Aprox. 24 meses
(varia de acuerdo al uso y otros factores)	(con 1 hora de uso diario, utilizando la pila alcalina solamente)
Desconexión automática de corriente:	Aprox. 7 min.
Temperatura de funcionamiento:	0°C - 40°C
Dimensiones:	
[EL-244W]	61 mm (ancho) $\times$ 104 mm (espesor) $\times$ 8.4 mm (alto)
[EL-310W]	87 mm (ancho) $\times$ 122 mm (espesor) $\times$ 26.5 mm (alto)
[EL-377W]	72 mm (ancho) $\times$ 120.5 mm (espesor) $\times$ 8.4 mm (alto)
Peso:	
[EL-244W]	Aprox. 46 g (pila incluida)
[EL-310W]	Aprox. 91 g (pila incluida)
[EL-377W]	Aprox. 62 g (pila incluida)
Accesorios:	Pila de manganeso alcalino (instalada), manual de manejo

OPERATIONS

OPERACIONES

- Press CCE twice to clear any residual values and calculation instructions in the calculator.
- Before starting memory calculations, press CM (EL-244W: RCM twice) to clear the memory contents.
- For expressing calculation examples, only the symbols that are required for explanation are mentioned.
- Example procedures are listed in following manner unless otherwise specified.

(1) Example	(2) Key operations	(3) Display
-------------	--------------------	-------------

- Pulse dos veces CCE para borrar cualquier instrucción y valor residual de la calculadora.
- Antes de iniciar cálculos en la memoria, pulse CM (EL-244W: dos veces RCM) para borrar el contenido de la memoria.
- Al expresar ejemplos de cálculo, sólo se mencionan los símbolos necesarios para la explicación.
- Los procedimientos de ejemplos están puestos de la siguiente manera, a menos que se especifique lo contrario.

(1) Ejemplo	(2) Operación de teclas	(3) Exhibición
-------------	-------------------------	----------------

HOW TO PERFORM BASIC CALCULATIONS PARA EFECTUAR CÁLCULOS BÁSICOS

- In these display examples, symbols such as "=" and "+", "-", "x", "/" which are visible on the actual display are omitted.
- En estos ejemplos de visualización se omiten los símbolos tales como "=" y "+", "-", "x", "/" que sí aparecen en la visualización real.

(1)	(2)	(3)
	CCE CCE	0.
$(-24+2)+4=-5.5$	--- 24 + 2 = 4 =	-5.5
$34+57=91$	34 + 57 =	91.
$45+57=102$	45 =	102.
$38-26=12$	38 --- 26 =	12.
$35-26=9$	35 =	9.
$68 \times 25 = 1700$	68 x 25 =	1'700.
$68 \times 40 = 2720$	40 =	2'720.
$35 \div 14 = 2.5$	35 + 14 =	2.5
$98 \div 14 = 7$	98 =	7.
$200 \times 10\% = 20$	200 x 10 $\%$ =	20.
$(9+36) \times 100 = 25$	9 + 36 $\%$ =	25.
$200 + (200 \times 10\%) = 220$	200 + 10 $\%$ =	220.
$4^3 = (4^3)^2 = 4096$	4 x = = x =	4'096.
$1/8 = 0.125$	8 + =	0.125
EL-244W:		
$25 \times 5 = 125$	RCM RCM 25 x 5 M+	M 125.
$\rightarrow 84 + 3 = 28$	84 + 3 M-	M 28.
$+ 68 + 17 = 85$	68 + 17 M+	M 85.
182	RCM	M 182.
	RCM	182.
EL-310W/EL-377W:		
	CM 25 x 5 M+	M 125.
	84 + 3 M-	M 28.
	68 + 17 M+	M 85.
	RM	M 182.
	CM	182.
$2+3 \rightarrow 2+4=6$	2 + 3 CCE 4 =	6.
$5 \times 2 \rightarrow 5 \div 2 = 2.5$	5 x 2 = 2 =	2.5
EL-244W/310W:		
$98765432+0.444$	98765432 + 0.444 x	2.2244466 ^E
$\times 555$	CCE 555 =	1'234.5678
$= 1234.5678 \times 10^8$	(1234.5678 $\times 10^8 = 123456780000$)	
EL-377W:		
$9876543212+0.444$	9876543212 + 0.444 x	2.224446669 ^E
$\times 555$	CCE 555 =	1'234.567901
$= 1234.567901 \times 10^{10}$	(1234.567901 $\times 10^{10} = 12345679010000$)	
(EL-310W/377W)		
(1)	(2)	(3)
$13 \times (-4) \div 2 = -26$	13 x 4 + 2 = 2 =	-26.
$\sqrt{25} - 9 = -4$	25 = 9 = $\sqrt{\text{=}}$	4.
$123456 \rightarrow 123478$	123456 + 22 = 78	123'478.

CALCULATING TAX / CÁLCULO DEL IMPUESTO

- To perform a tax calculation, first it is absolutely necessary to set and check the tax rate. (The initial tax rate is 0.)
A tax rate can be set (or changed) with a number containing up to four digits. (Decimal point is not regarded as a digit.)
The set tax rate is retained until it is changed. However, the set tax rate may be changed or lost if the battery is consumed largely.
- Para hacer cálculos de impuestos, es esencial ajustar y comprobar primero la tasa de impuestos (La tasa de impuestos por defecto es 0).
La tasa de impuestos puede ser ajustada (o cambiada) con un número de hasta cuatro dígitos. (El punto decimal no se considera como un dígito).
La tasa de impuestos se mantiene mientras no se la cambie. Sin embargo, la tasa de impuestos puede variar o borrarse si la carga de la batería baja demasiado.

- Confirming the tax rate. (0%)
Para confirmar la tasa impositiva. (0%)

(2)	(3)
C-CE C-CE RATE RECALL -TAX	TAX 0

- Set a 5% tax rate.
Calculate the tax on \$800 and calculate the total including tax.
Establezca un tipo de impuesto del 5%.
Calcule el impuesto sobre \$800 y calcule el total incluyendo el impuesto.

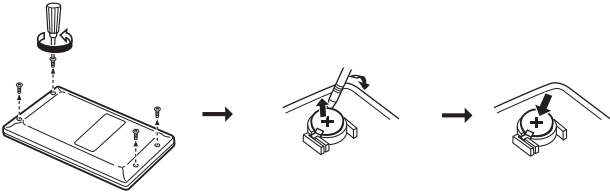
(2)	(3)
C-CE C-CE RATE SET +TAX 5 RATE SET +TAX	TAX 5
C-CE C-CE 800	800
+TAX	+TAX 840
+TAX	TAX 40

- Perform two calculations using \$84 and \$52.5, both of which already include tax. (tax rate: 5%)
Calculate the tax on the total and the total without tax.
Realice dos cálculos utilizando \$84 y \$52.5, los cuales ya incluyen impuesto. Calcule el impuesto sobre el total y el total sin impuesto. (tasa de impuestos: 5%)

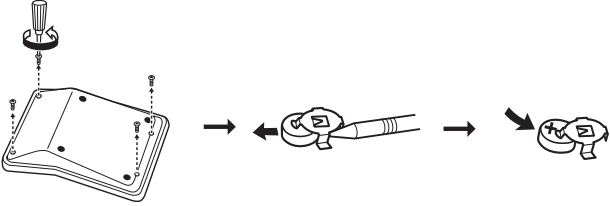
(2)	(3)
C-CE C-CE 84 + 52.5 =	= 136.5
-TAX	-TAX 130
-TAX	TAX 6.5

BATTERY REPLACEMENT
CAMBIO DE PILAS

EL-244W/377W:



EL-310W:



In U.S.A.:

LIMITED WARRANTY

VICTOR TECHNOLOGY LLC warrants to the first consumer purchaser that this Sharp brand product (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period(s) set forth below.

This warranty does not apply to any appearance items of the Product nor to the additional excluded item(s) set forth below nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth below and provide proof of purchase to the service.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE PERIOD(S) FROM THE DATE OF PURCHASE SET FORTH BELOW. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time period described herein on behalf of Victor.

The warranties described herein shall be the sole and exclusive warranties granted by Victor and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Victor to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall Victor be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer. Nor shall Victor be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Your Product :	Electronic Calculator
Warranty Period for this Product :	One (1) year parts and labor from date of purchase.
Additional Items Excluded from Warranty Coverage :	Any consumable items such as paper, maintenance cartridge, ink cartridges supplied with the Product or to any equipment or any hardware, software, firmware, fluorescent lamp, power cords, covers, rubber parts, or peripherals other than the Product.
How to Obtain Service :	Call Victor Technology LLC toll free at 1-844-578-1637 or email SharpService@victortech.com. You may be asked to ship your Product to Victor Technology LLC for repair. Be sure to have proof of purchase available. If you ship or mail the Product, be sure it is packaged carefully.

TO OBTAIN SUPPLY, ACCESSORY OR PRODUCT INFORMATION, CALL 1-844-578-1637.
Sharp Calculator Service by Victor Technology LLC
www.SharpCalculators.com