SHARP

ELECTRONIC CALCULATOR

ELSI MATE

MODEL **EL-CC12D EL-CC12G EL-CC12GP EL-CC14GP**

OPERATION MANUAL

SHARP CORPORATION

20ESC(TINSEA306EHZZ)

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.
- 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.
- Please press [ON/C·CE] if you see no indication.
- This product, including accessories, may change due to upgrading without prior notice.

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.

SPECIFICATIONS

Type:	Electronic calculator
Operating capacity:	
[EL-CC12D/ EL-CC12G/CC12GP]	12 digits
[EL-CC14GP]	14 digits
Power supply:	Built-in solar cell and Alkaline manganese battery (1.5V ⎓ (DC) LR44 or equivalent × 1)
Operating time: (varies according to use and other factors)	Approx. 2 years (with 1 hour of daily use, using the alkaline manganese battery only)
Automatic Power-off:	Approx. 7 min.
Operating temperature:	0°C - 40°C (32°F-104°F)
Dimensions:	
[EL-CC12D]	132 mm(W) × 166 mm(D) × 30 mm(H)
[EL-CC12G/ EL-CC12GP/CC14GP]	158 mm(W) × 198 mm(D) × 32 mm(H)
Weight: (battery included)	
[EL-CC12D]	Approx. 169 g
[EL-CC12G]	Approx. 236 g
[EL-CC12GP]	Approx. 240 g
[EL-CC14GP]	Approx. 244 g
Accessories:	Alkaline manganese battery (installed), Operation manual

OPERATIONS

1. Before starting calculations, press [CA] to clear (zero-clear).
2. The position of any switch that is not specificaly designated, may be set to any position.
3. For expressing calculation examples, only the symbols that are required for explanation are mentioned.
4. Example procedures are listed in following manner unless otherwise specified.

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

◆ F 4 3 2 0 A (EL-CC12GP/CC14GP)

DECIMAL POINT ASSIGNMENT SWITCH

"F" position: Set the decimal point to "floating" point.
"4,3,2,0" positions: The decimal figures can be set to the respective numbers.
"A" position: Assigns Adding mode (sets the decimal at 2). In the case of addition/subtraction, the decimal point will be placed at 2 automatically. If is registered, or in case of non-additive/non-subtractive calculation, this function will not be applicable.

◆ ↑5/4↓ (EL-CC12GP/CC14GP)

ROUNDING SELECTOR

Specifies the handling of the digit immediately below the position set by the decimal selector.
(For example, if the decimal selector is set to 3, then the fourth decimal will be rounded.)

"↑" position: The answer will be rounded up.
"5/4" position: The answer will be rounded off.
"↓" position: The answer will be rounded down.

* While the decimal selector is set to the "F" (i.e., floating) position, or if the decimal place cannot be determined (preliminary calculation results, for instance), the answer will always be rounded down regardless of the setting above.

◆ STATUS DISPLAY AND COUNTER

(1) 23×2÷4=11.5

(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A)

(2)	(3)
[C·CE] [C·CE]	0.
23	001 23.
[×]	001 × 23.
2	002 × 2.
[÷]	002 ÷ 46.
4	003 ÷ 4.
[=]	004 G = 11.5

◆ CHECK & CORRECT

- The maximum number of calculation steps (operators and numerical values) that can be stored is 300. And when 300 steps are reached, correction/insertion/deletion cannot be performed.
- Symbols when replaying may be different from those when calculating (ex. "M" symbol of memory calculations is displayed as recall memory or clear memory when replaying.).
- In some calculations, correction/insertion/deletion cannot be performed.
- Pressing [CA] will clear all memories, including stored calculation steps. And if the battery is consumed largely, all memories are also cleared.
- At the time of correction/insertion/deletion, if decimal point settings or rounding settings or tax rate of stored each calculation step are changed, all stored calculation steps will be recalculated with the changed settings.
- After starting correction/insertion (pressing [CORRECT] / [INSERT]), the entered value is canceled by pressing [C·CE] [C·CE] before pressing [CORRECT] / [INSERT] to set the entered value.
- If an error occurs ("E" symbol appears), all stored calculation steps will be cleard.
- "BUSY" may be displayed during recalculation.

[AUTO REPLAY] AUTO REPLAY

- Auto Replay starts by pressing [AUTO REPLAY] and you can recall a calculation formula automatically. Auto Replay stops by pressing [AUTO REPLAY] during Auto Replay and pressing [AUTO REPLAY] again starts Auto Replay to resume.

(1) (400−80+500)×3=2460

(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A)

(2)	(3)
[C·CE] [C·CE] 400 [−] 80 [+] 500 [×] 3 [=]	005 G = 2'460.
[AUTO REPLAY]	001 AUTOREPLAY 400.
	002 AUTOREPLAY − 80.
	003 AUTOREPLAY + 500.
[AUTO REPLAY]	004 REPLAY × 3.
[AUTO REPLAY]	005 REPLAY = 2'460.

[PREV] / [NEXT] PREVIOUS / NEXT

- Each time [NEXT ▼] is pressed, calculation formulas are recalled in the order they are entered, while each time [PREV ▲] is pressed, calculation is recalled in the order of its answer.

(1) (400−80+500)×3=2460

(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A)

(2)	(3)
[C·CE] [C·CE] 400 [−] 80 [+] 500 [×] 3 [=]	005 G = 2'460.
[PREV ▲]	005 REPLAY = 2'460.
[PREV ▲]	004 REPLAY × 3.
[PREV ▲]	003 REPLAY + 500.
[PREV ▲]	002 REPLAY − 80.
[PREV ▲]	001 REPLAY 400.

[CORRECT] CORRECT

(1) (400−80+500)×3 → (400−100+500)×3=2400

(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A)

(2)	(3)
[C·CE] [C·CE] 400 [−] 80 [+] 500 [×] 3 [=]	005 G = 2'460.
[NEXT ▼]	001 REPLAY 400.
[NEXT ▼]	002 REPLAY − 80.
[CORRECT]	002 REPLAY CORRECT − 80.
100	002 REPLAY CORRECT − 100.
[CORRECT]	002 REPLAY − 100.
[NEXT ▼] ([AUTO REPLAY])	003 REPLAY + 500.
[NEXT ▼]	004 REPLAY × 3.
[NEXT ▼]	005 REPLAY = 2'400.

[INSERT] INSERT

(1) (400−80+500)×3 → (400−80+500)÷2×3=1230

(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A)

(2)	(3)
[C·CE] [C·CE] 400 [−] 80 [+] 500 [×] 3 [=]	005 G = 2'460.
[PREV ▲]	005 REPLAY = 2'460.
[PREV ▲]	004 REPLAY × 3.
[INSERT]	004 REPLAY INSERT + 0.
[÷]	004 REPLAY INSERT ÷ 0.
2	004 REPLAY INSERT ÷ 2.
[INSERT]	004 REPLAY ÷ 2.
[NEXT ▼] ([AUTO REPLAY])	005 REPLAY × 3.
[NEXT ▼]	006 REPLAY = 1'230.

DEL/→ DELETE

(1) (400−80+500)×3 → (400+500)×3=2700

(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A)

(2)	(3)
C·CE C·CE 400 − 80 + 500 × 3 =	005 G = 2'460.
NEXT ▼	001 REPLAY 400.
NEXT ▼	002 REPLAY − 80.

DEL/→	002 REPLAY + 500.
NEXT ▼ (AUTO REPLAY)	003 REPLAY × 3.
NEXT ▼	004 REPLAY = 2'700.

• To check a calculation formula after performing the Correct, Insert and Delete function, press PREV ▲ / NEXT ▼ repeatedly or press AUTO REPLAY.

MARKUP CALC.

(1)	(2)	(3)
Cost = $350, Markup % = 30% → Selling Price ?(500), Markup ?(150)	C·CE C·CE 350 ÷ 30 MU MU	MU 500. MU 150.
Selling Price = $500, Markup % = 30% → Cost ?(350)	C·CE C·CE 500 × 30 +/− MU	MU 350.
Cost = $350, Markup % on cost = 30% → Selling Price ?(455)	C·CE C·CE 350 × 30 MU	MU 455.
Selling Price = $455, Markup % on cost = 30% → Cost ?(350), Markup ?(105)	C·CE C·CE 455 ÷ 30 +/− MU MU	MU 350. MU 105.

CALCULATING TAX

• 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.

(1) • Confirming the tax rate. (0%)

(2)	(3)
C·CE C·CE RATE RECALL −TAX	TAX % 0.

(1) • Set a 5% tax rate.
Calculate the tax on $800 and calculate the total Including tax.

(2)	(3)
C·CE C·CE	0.
RATE SET +TAX 5 RATE SET +TAX	TAX % = 5.
C·CE C·CE 800	800.
+TAX	+TAX 840.
+TAX	TAX 40.

(1) • 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.

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

HOW TO PERFORM BASIC CALCULATIONS

(1)	(2)	(3)
	(EL-CC12GP/EL-CC14GP: F 4 3 2 0 A) CA	0.
(−24+2)÷4=−5.5	24 +/− + 2 ÷ 4 =	−5.5
13×(−4)÷2=−26	13 × 4 +/− ÷ 2 =	−26.
34+57=91 45+57=102	34 + 57 = 45 =	91. 102.
38−26=12 35−26=9	38 − 26 = 35 =	12. 9.
68×25=1700 68×40=2720	68 × 25 = 40 =	1'700. 2'720.
35÷14=2.5 98÷14=7	35 ÷ 14 = 98 =	2.5 7.
200×10%=20	200 × 10 %	20.
(9÷36)×100=25	9 ÷ 36 %	25.
200+(200×10%)=220	200 + 10 %	220.
$4^6=(4^3)^2$=4096	4 × = = × =	4'096.
1/8=0.125	8 ÷ =	0.125
25 × 5 = 125 −) 84 ÷ 3 = 28 +) 68 + 17 = 85 182	R·CM R·CM 25 × 5 M+ 84 ÷ 3 M− 68 + 17 M+ R·CM R·CM	M 125. M 28. M 85. M 182. 182.
2+3 → 2+4=6	2 + 3 C·CE 4 =	6.
5×2 → 5÷2=2.5	5 × ÷ 2 =	2.5
123456 → 123478	123456 DEL/→ DEL/→ 78	123'478.
23.5+42.3=65.8 72.4−37.32+12=47.08 +) 27−19−21.61=−13.61 99.27	GT GT C·CE 23.5 + 42.3 = 72.4 − 37.32 + 12 = 27 − 19 − 21.61 = GT	0. G 65.8 G 47.08 G -13.61 G 99.27
EL-CC12D / EL-CC12G / EL-CC12GP: 987654320988÷0.444 ×555 =1234.56790123×10^{12}	C·CE 987654320988 ÷ 0.444 × C·CE 555 = (1234.56790123×10^{12}=1234567901230000)	E 2.22444666889 1'234.56790123
EL-CC14GP: 98765432099998÷0.444 ×555 =1234.5679012499×10^{14}	C·CE 98765432099998 ÷ 0.444 × C·CE 555 = (1234.5679012499×10^{14} =123456790124990000)	E 2.2244466689188 1'234.5679012499
EL-CC12GP / EL-CC14GP: F 4 3 2 0 A 1$ 45 ¢ 45$ 00 ¢ −7$ 63 ¢ 38$ 82 ¢ Note: • was not used in the entries.	C·CE 145 + 4500 − 763 =	1.45 46.45 38.82

BATTERY REPLACEMENT