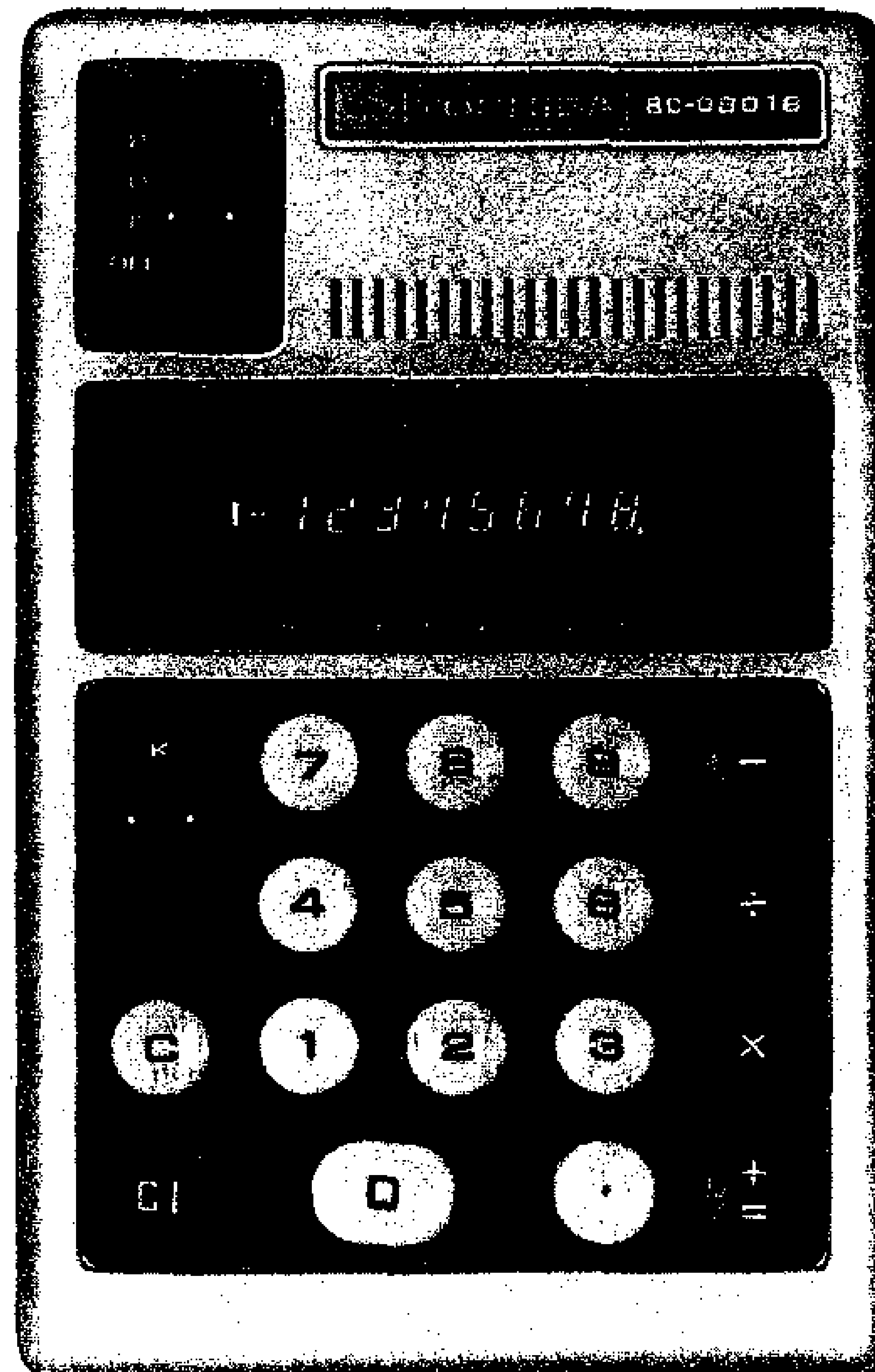


TOSHIBA ELECTRONIC DESK-TOP CALCULATOR

MODEL **BC-0801B**
OPERATING INSTRUCTION

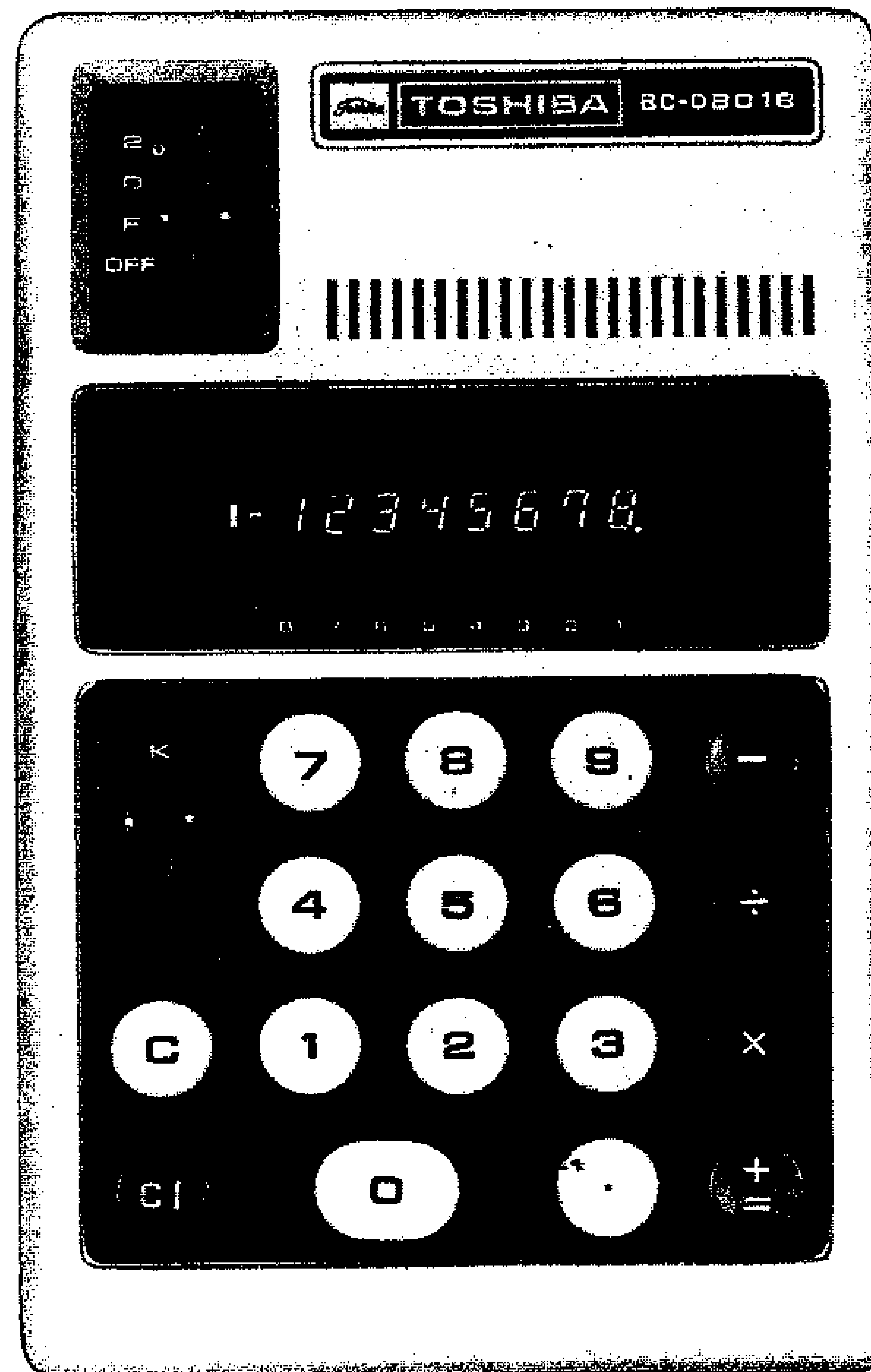


BC-0801B

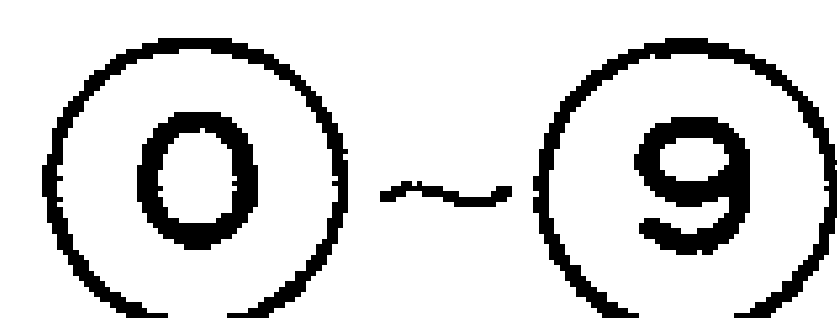


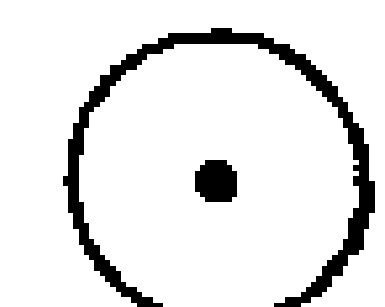
CONTENTS







Explanation of keys switches and indication lamps	2
Method of operation and precautions	4
Calculation examples	
1. Addition and Subtraction	5
2. Multiplication	6
3. Division	7
4. Successive multiplication and Successive division	8
5. Calculation with a constant	9
6. Successive multiplication and division with a constant	10
7. Raising to a power	11
Applied Calculation	
1. Interest calculation	12
2. Amount of annuity	13
3. Discount calculation	14
Handling of the calculator and charger	15
Precautions in handling the battery	16
How to use your TOSHIBA BC-0801B	17
Specifications	17

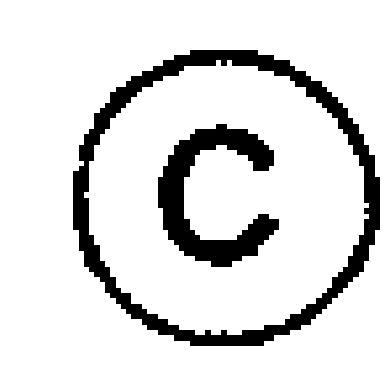



EXPLANATION OF KEYS, SWITCHES AND INDICATION LAMPS

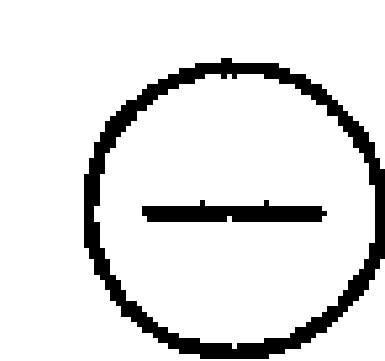
 NUMERICAL KEYS


 **DECIMAL POINT KEY**
 This key is to be depressed at a required position. If the figure is like 0., then one does not need to depress ⑩ key but begin just from depressing ① key and then other numerical keys.

 **CLEAR INDICATOR KEY**
 This key is depressed for clearing a entered figure by error.
 Note: When this key is depressed an indication of incorrect number entry "0" is appeared after depressing function key , ,  or , however, the results of calculation carried in accordance with the data directly concerned with incorrect number entry are stored in the calculation register. It is therefore advisable to perform recalculations by depressing  key or by modifying the calculation method.

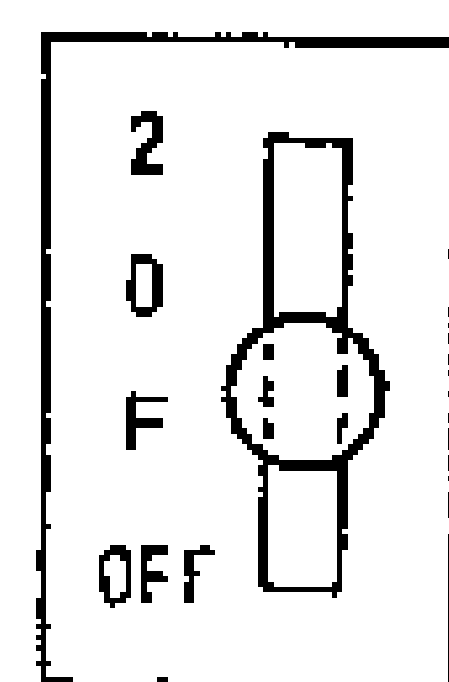
 **CLEAR KEY**
 This key is used for clearing all figures registered.

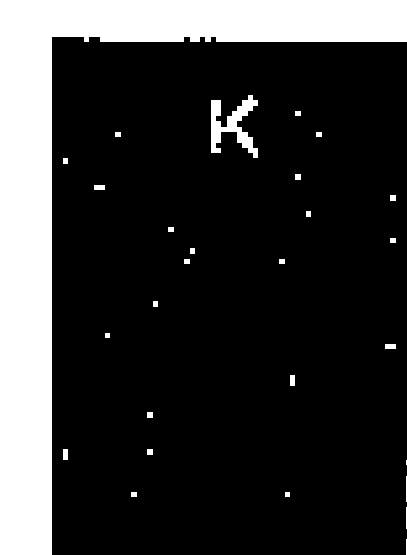
 **ADDITION AND EQUAL KEY**
 This key is used for obtaining the results of addition, multiplication and division.

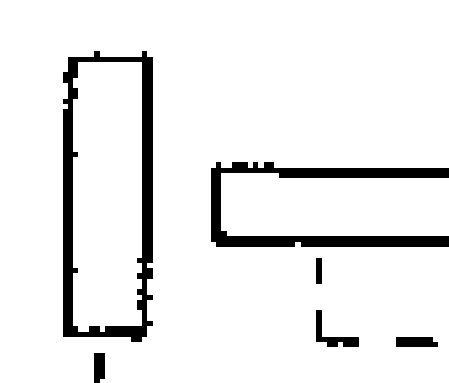
 **SUBTRACTION AND NEGATIVE EQUAL KEY**
 This key is used for obtaining the results of subtraction, multiplication and division.
 Press also for setting a negative figure.

 **MULTIPLICATION KEY**
 This key is used for multiplication as well as for checking of intermediate results in successive multiplication.

 **DIVISION KEY**
 This key is used for division. This key is also for the checking of intermediate results in successive division.

 **POWER AND DECIMAL SETTING SWITCH**
 This switch serves as both the power source switch and the decimal setting switch. Therefore, when the switch is turned off (OFF side), the calculator is disconnected from the power supply from the battery.
 Designation of decimal point:
 There are three decimal points (F, 0 and 2) to be designated.
 F: The result of calculation will be obtained as floating decimal point.
 0 or 2: The result of calculation will be obtained as fixed decimal point.

 **CONSTANT SWITCH**
 This switch should be set for multiplication, division or power calculation with a constant.

 **INDICATION LAMPS**
 Minus lamp
 Overflow lamp

METHOD OF OPERATION AND PRECAUTIONS

1. When the power and decimal setting switch is set either to F, 0 or 2, the power switch is turned on simultaneously when the decimal point is set.
2. Prior to calculation, press $\text{\textcircled{C}}$ key and set the constant switch to the desired position.
3. Irrespective of the decimal setting, entering figure is possible. Further, when the power and decimal setting switch is set to F, the decimal point of result is indicated as being a floating decimal while it is indicated at the specified position of decimal when this switch is set either to 0 or 2. Provided, however, that, the decimal point of intermediate result is indicated as being a floating decimal.
4. When the integer numbers calculated exceed 8 digits, the machine will be overflowed, and all keys, except for $\text{\textcircled{C}}$ key, are locked. In order to proceed with further calculations, clear the calculation register by depressing $\text{\textcircled{C}}$ key.
5. When entered figure exceeds 8 digit, the machine will be overflowed. Then the numerical keys are locked, and the number of entered figure after the 9th digit is ignored. In this case, the other keys are not locked; therefore, it is possible to proceed with calculations. However, it is better to reenter the number by depressing the $\text{\textcircled{CI}}$ key.
6. In case where the specified decimal point position is set either to 0 or 2, the calculator indicates all the calculation results after automatically performing a round-off calculation.

Calculation examples

1. ADDITION AND SUBTRACTION

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	Addition $123 + 456 = 579$	0	$\text{\textcircled{C}}$	0
			123	123
			\oplus 456 \oplus	579
b	Subtraction $789 - 123 = 666$	0	$\text{\textcircled{C}}$	0
			789	789
			\ominus 123 \ominus	666
c	Subtraction (negative answer) $456 - 789 = -333$	0	$\text{\textcircled{C}}$	0
			456	456
			\oplus 789 $\ominus \ominus$	333
d	Round off addition $123.4554 + 456.125$ $(\rightarrow 123.46)(\rightarrow 456.13)$ $= 579.5804$ $(\rightarrow 579.59)$	2	$\text{\textcircled{C}}$	0.0000
			123.4554	123.46
			\oplus 456.125	579.59
			\oplus	

NOTE: Always press the $\text{\textcircled{C}}$ key before starting addition and subtraction.

2. MULTIPLICATION

Max. digits of product — 8 digits
 Multiplicand × Multiplier — Max. 16 digits

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	$12.34 \times 4.567 = 56.35678$	F	$\begin{array}{r} 12.34 \\ \times 4.567 \\ \hline \end{array}$	12.34 56.35678
b	Round off $12.34 \times 4.567 = 56.35678$ (→ 56.36)	2	$\begin{array}{r} 12.34 \\ \times 4.567 \\ \hline \end{array}$	12.34 56.36
c	minus calculation $(-12) \times 34 = -408$	0	$\begin{array}{r} \text{ⓐ} \\ 12 \\ \ominus \\ \times 34 \\ \hline \end{array}$	0 12 12 408
d	$12345678.7654321 \times 1.1111111 = 12345678.7654321$	2	$\begin{array}{r} 12345678. \\ \times 1.1111111 \\ \hline \end{array}$	12345678. 12345678
e	$12345678.7654321^2 = 123456787654321$	2	$\begin{array}{r} 12345678. \\ \times 12345678. \\ \hline \end{array}$	12345678. (Overflow lamp lights up) 1234567.8

NOTE: 1. The calculator design permits indication of the calculation results of the first 8 digits. Accordingly, in the case of example d, the calculation results take priority in indication; therefore, the decimal point is not indicated at the specified position but is indicated at the position after the 8th digit.

2. In the case of overflow, the calculator is so designed that the first 8 digits may be indicated. At this time, the decimal point in the calculated digits is located at a position equivalent to 10^8 (example e).

3. DIVISION

Max. digit of quotient = 8 digits
 Divisor = Dividend = 8 digits

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	$123.4 \div 45.678 = 2.7015193$	F	$\begin{array}{r} 123.4 \\ \div 45.678 \\ \hline \end{array}$	123.40 2.7015193
b	Round off $147.2 \div 12.3 = 11.9674 \dots$ → 11.97	2	$\begin{array}{r} 147.2 \\ \div 12.3 \\ \hline \end{array}$	147.2 11.97
c	minus calculation $(-1234) \div 45 = -27$	0	$\begin{array}{r} \text{ⓐ} \\ 1234 \\ \div 45 \\ \hline \end{array}$	0 1234 1234 27

4 . SUCCESSIVE MULTIPLICATION AND SUCCESSIVE DIVISION

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	$12.3 \times 45.6 \times 78.9$ $= 44253.432$	F	12.3 ⊗ 45.6 ⊗ 78.9 ⊕	12.3 560.88 44253.432
b	$369 \div 123 \div 45.6$ $= 0.06578\dots$	F	369 ⊖ 123 ⊖ 45.6 ⊖	369 3 0.0657894
c	$123 \times 45.6 \div 78.9$ $= 71.08745\dots$	F	123 ⊗ 45.6 ⊖ 78.9 ⊖	123 5608.8 71.087452
d	$1 \div 3 \times 789 \times 2$ $= 526$	2	1 ⊖ 3 ⊗ 789 ⊗ 2 ⊕	1. 0.3333333 262.99997 526.00

5 . CALCULATIONS WITH A CONSTANT

In the multiplication the multiplicand assumes a role of constant, whereas the divisor serves as a constant in division. The constant switch can be set at any time before the \oplus key is depressed.

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	$360 \times 12.3 = 4428$ $360 \times 45.6 = 16416$	2	(K)ON 360 ⊗ 12.3 ⊖ ----- 45.6 ⊖	360 4428.00 16416.00
b	$789 \div 24 = 32.875$ $567 \div 24 = 23.625$	F	(K)ON 789 ⊖ 24 ⊖ ----- 567 ⊖	789 32.875 23.625

6. SUCCESSIVE MULTIPLICATION AND DIVISION WITH A CONSTANT

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
			Ⓞ (K)ON	0
a	$1.25 \times 450 \times 23$ $= 12937.50$	2	1.25 Ⓢ 450 Ⓢ 23 Ⓢ	1.25 562.5 12937.50
	$1.25 \times 450 \times 56$ $= 31500.00$		56 Ⓢ	31500.00
	$1.25 \times 450 \times 320$ $= 180000.00$		320 Ⓢ	180000.00
			Ⓞ (K)ON	0
b	$789 \div 456 \div 3 = 0.58$	2	789 Ⓢ 456 Ⓢ 3 Ⓢ	789 1.7302631 0.58
	$123 \div 3 = 41$		123 Ⓢ	41.00
			Ⓞ (K)ON	0

Note: In performing the successive multiplication or successive division, the underlined part serves as a constant factor when the constant switch is set as shown below.

- Ex. a) $\underline{a} \otimes \underline{b} \otimes (K)ON \underline{c} \otimes d \oplus$
 b) $a \otimes \underline{b} \otimes \underline{c} (K)ON \otimes d \oplus$
 c) $\underline{a} \otimes \underline{b} \otimes \underline{c} \otimes (K)ON \underline{d} \oplus$
 d) $a \oplus \underline{b} \oplus \underline{c} \oplus (K)ON \underline{d} \oplus$

7. RAISING TO N-th POWER

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
			(K)ON	
a	$2^3 = 8$	0	2 Ⓢ	2
	$(2^2) \dots 4$		Ⓢ	4
	$(2^3) \dots 8$		Ⓢ	8
b	$3^8 = 6561$	0	3 Ⓢ	3
	$(3^2) \dots 9$		Ⓢ	9
	$(3^4) \dots 81$		Ⓢ	81
	$(3^8) \dots 6561$		Ⓢ	81
			Ⓢ	6561

- NOTE: 1. When the constant switch is set and a power calculation is to be performed the sequence should be $2^2, 2^3, 2^4$ etc., as shown in example "a" above.
 2. When the constant switch is not used a power calculation is to be performed the sequence should be $2^2, 2^4, 2^8$, etc., as shown in example "b" above.

Examples of applied calculation

1. INTEREST CALCULATION

If a principal of \$ 12,300 were deposited for 4 years at an annual interest rate of 4.5% the sum of the principal and interest can be calculated as shown below.

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	Simple interest $12300(1 + 0.045 \times 4)$ - 14514	2	.045	0.045
			⊗	
			4	0.18
			⊕	
			1	1.18
			⊖	1.18
			⊗	
			12300	
			⊕	14514.00
			b	Compound interest $12300(1 + 0.045)^4$ - 14667.9775
1	1.			
⊕				
.045	1.045			
⊖				
(K)ON	1.045			
⊗	1.092025			
⊕	1.1411661			
⊖				
(K)OFF	1.1925185			
⊖				
⊗	12300			
⊕	14667.978			

NOTE :Formula for interest calculation is:

Simple interest: $A(1 + r \times t)$ Compound interest: $A(1 + r)^t$
Where A : Principal r : Interest rate t : Period of deposit

2. AMOUNT OF AN ANNUITY

If annuity of \$ 12,000 were deposited at a rate of 6% interest, compounded annually paid on the accumulated deposit, the total amount accumulated the end of 5 years can be calculated as shown below.

EX-AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
a	$\frac{(1+0.06)^5-1}{0.06} \times 1200$ = 67645.1	F	Ⓒ	0.
			1	1.
			⊕	
			.06	1.06
			⊖	
			(K)ON	
			⊗	1.06
			⊕	1.1236
			⊕	1.191016
			⊕	1.2624769
			(K)OFF	
			⊖	1.3382255
			1	0.3382255
			⊗	0.3382255
			⊕	12000
⊕	4058.706			
⊖				
⊕	67645.1			

NOTE :Formula for amount of an annuity is :

$$\frac{(1+r)^t-1}{r} \cdot A$$

Where A : A fixed sum deposited
r : Interest rate
t : Number of years

3. DISCOUNTING CALCULATION

EX AMPLE	CALCULATION	DECIMAL POINT PRESETTING SWITCH	CALCULATION SEQUENCE	DISPLAY
	List price		⊙	0.
	\$ 12,000		↑	
	Discount rate		⊕	1.00
	5%	2	.05	
	Discounted price		⊖	0.95
	11,400		⊗	0.95
			12000	
			⊕	11400.00

Note: Formula for discounting calculation is: $P(1-r)$
 Where P : List price
 r : Discount rate

HANDLING OF THE CALCULATOR AND CHARGER

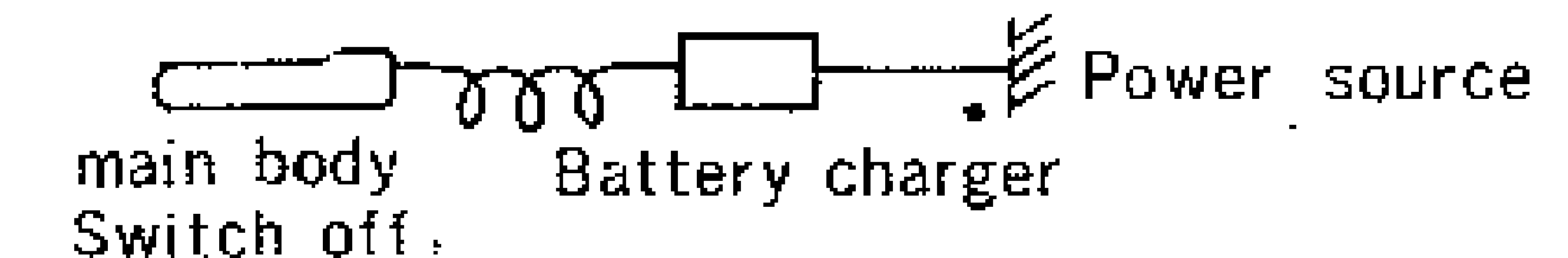
The calculator incorporates a battery, a feature that makes calculation possible any time, any place, a power supply is not available. The design permits the calculator to be supplied by a general power source for normal performance also.

The following are the two methods of application.

1. In case the calculator is operated on power from the battery:

Connect the charger to the corresponding part on the calculator to charge the battery built in the calculator, as shown in the illustration. In this case, the power switch of the calculator must be off. The battery is fully charged in approximately 13~15 hours, making it possible for the calculator to perform calculations.

The battery may be used continuously for approximately 3 hours. In cases where the battery has been employed for the specified period, it is essential that the battery be charged from a general power source.



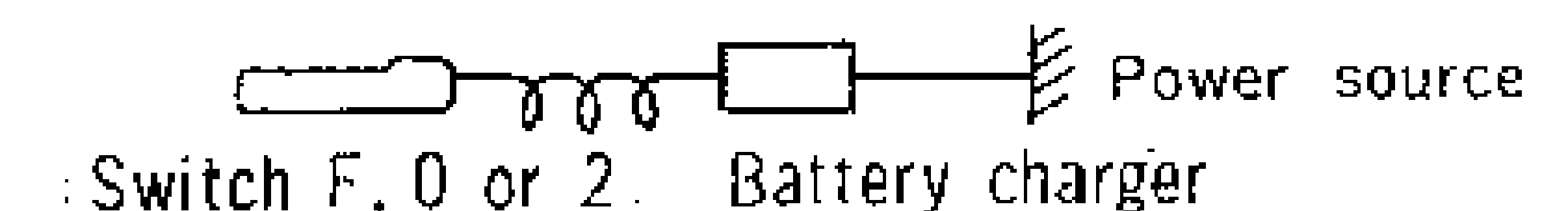
2. When the calculator is employed while the battery is being charged from the power supply:

The power source switch is off; however, set to F, 0, or 2 and the indicator lamp lights, confirming that the calculator is ready for use. In this case, the calculator is in use while the battery is being charged, therefore, the battery is also fully charged in approximately 45~50 hours.

The calculator may be used with only the battery, after disconnecting the charger from the battery.

Note: Chargeable type batteries are greatly influenced by temperature, humidity, voltage, etc.

The charging time and battery application time are therefore standard. In some cases, the battery service interval may be reduced if the charge is performed at a temperature other than that specified in the guarantee.



PRECAUTIONS IN HANDLING THE BATTERY

1. When the calculator is initially placed in operation or when not operated for approximately 2 months, the power level of the battery may be reduced considerably.
It is therefore advisable to operate the calculator while the battery is being charged.
2. It is advisable to operate the calculator on battery power so that it may discharge, thus preventing deterioration and extending the service life.
The battery should be charged 1~2 times within two months for the purpose mentioned above.
3. When the power level is reduced, the indication lamp becomes dark, indicating that calculation is impossible.
In this case, operate the calculator with the battery connected to the charger.
4. It is difficult to charge the battery when the ambient temperature is less than 0 °C or when more than 40 °C.
In such cases, avoid, by all means, charging the battery as it will deteriorate performance.
5. The charger is furnished with the calculator at the time of purchase.
In addition to the charger, it is recommended that the following, designed exclusively for Toshiba electronic calculators, be employed for more excellent performance.

Model	Applicable voltage
BH-101	100, 110, 117, 127V
BH-103	200, 220, 240V

Furthermore, Model BH-102 designed by TOSHIBA for quick charge (3-hour charge, 3-hour continuous use type) is also.

HOW TO USE YOUR TOSHIBA BC-0801B

Although TOSHIBA BC-0801B being manufactured under the highest quality control and production techniques the following precautions should be observed when using it.

1. When pressing any keys, apply positive pressure.
Pressing two keys at the same time or pressing any key only half-way will result in erroneous calculations.
2. Do not place any other object on the machine when power switch is on.
Direct exposure to sunlight for extended periods, or to other heat sources should be avoided.
3. Use a piece of silicon cloth, never alcohol, petroleum, oil, etc., to clean the machine.
4. Contact TOSHIBA calculator's dealer when trouble occurs.

SPECIFICATIONS

Model Number :	BC-0801B
Numerical Keys :	Ten-keys
Capacity :	8 digits. Display 8 digits and symbol Addition and subtraction : 8 digits Multiplication : Max. digits of product 8 digits Multiplicand + Multiplier = Max. 16 digits Division : Max. digits of quotient = 8 digits Divisor = Dividend = 8 digits
Decimal point system :	Floating (F), presetting (0, 2) decimal point system
Computing elements :	L.S.I.,
Clock pulse :	30 KHz
Operations :	Four fundamental operations, successive multiplication and division, multiplication with a constant, raising to a power, and others.
Ambient temperature :	0°C to 40°C (32°F to 104°F)
Power Supply :	AC100, 110, 117, 120, 127 or 200, 220, 240V 50/60Hz
Power consumption :	1 W
Dimensions :	104mm(W) × 165 mm (D) × 46 mm(H)
Weight :	0.5 kg (1.1 lbs.)