SHARP

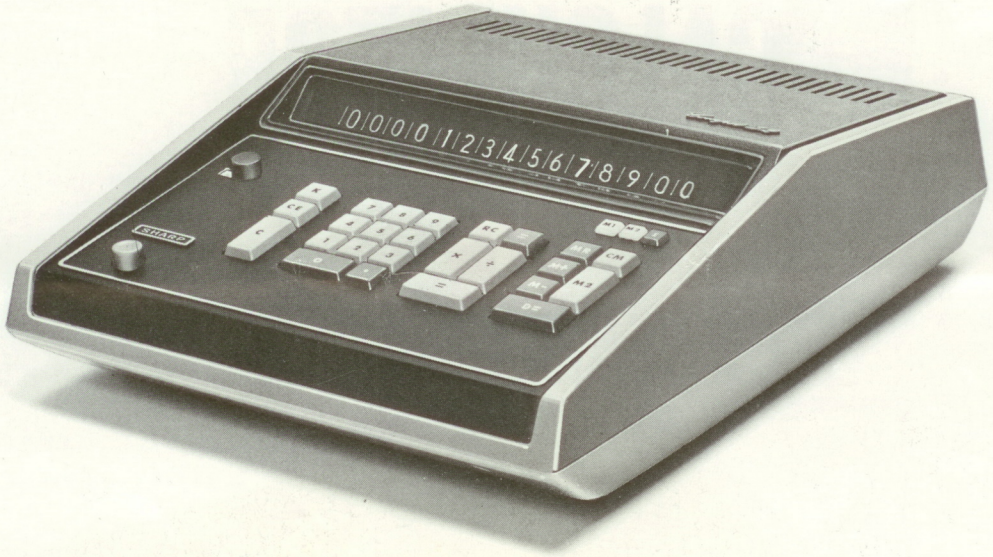
ELECTRONIC DESK CALCULATOR

WITH

IC

Compet-32

DOES MORE WITH LESS PARTS IN HALF THE SPACE



SPECIFICATIONS

Power source:
AC 100/110/120 or 200/220/240V
50-60 c/s

Capacity:
16 digits, 8 digit decimals
Addition & Subtraction
16 digits ± 16 digits = 16 digits
Multiplication
Total digits of multiplier and multiplicand: up to 16 digits (with rounding off)
Division 15 digits ÷ 15 digits = 16 digits − divisor digits (with rounding off)
Square root extraction: Up to 15 digits

Decimal point:
Automatic

Sign indication:
Minus indication lamp in the case of Negative

Calculations:
Four arithmetical operations, product ± product with individual products, quotient ± quotient with individual quotients, multiplication and division, multiplicand ± multiplicand with individual products, dividend ± dividend with individual quotients, multiplication and division by constant, square root extraction, exponent calculation, mixed calculation, etc.

Calculation speed:
Addition & subtraction 30ms
Multiplication 300ms
Division 300 ms

IC used: 22
Core memory: 4
Transistors: 317
Diodes: 1200
Clock frequency: 100KC
Temperature: 0°C−40°C(32°F−104°F)
Power consumption: 20W
Dimensions: 310mm wide, 113mm high, 405mm deep(12 1/4″ x 4 1/2″ x 16″)

OUTSTANDING FEATURES

∗Stable performance

Advanced IC and Core Memory registers assure unsurpassed stability and performance.

∗Compact

Revolutionary breakthrough in IC makes the CS-32A a truly compact calculator that can be carried anywhere with utmost ease and convenience.

∗Exceptional versatility

The CS-32A uses two memories which exceptionally widen calculation versatility. Carries out square root extraction, calculations by constant, etc. instantly.

∗Rounding off device

Setting the Round off dial counts fractions over 1/2 as one, rounds off others.

∗Tabulation dial

Specifies desired decimal digits.

∗Overflow error check lamp

When the results of multiplication and calculation by memory registers exceed 16 digits, the red Error lamp automatically turns on. No worry about mistake by overflow.

∗Memory indicator

When the memory entry is registered, the yellow Memory lamp turns on.

∗Double-set protection keys

Eliminate error, speed up operation...no more worry about double-setting keys.

∗Clear display panel

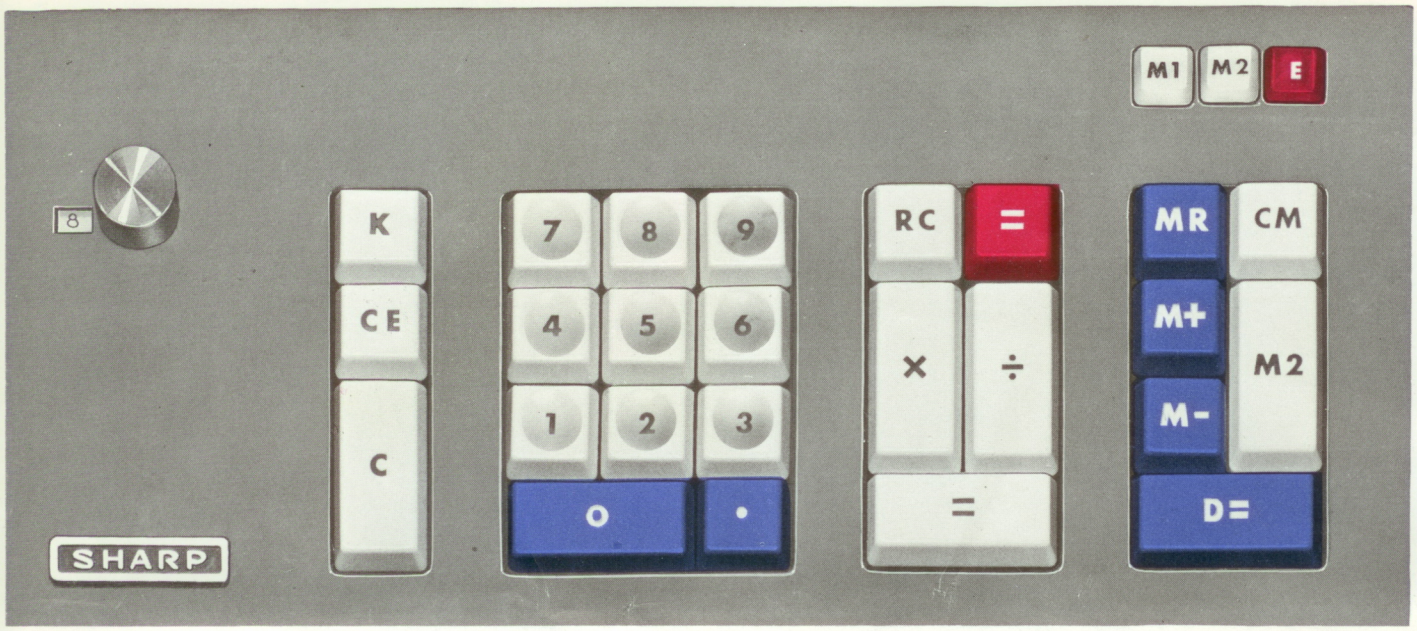
Snap reading with advanced electronic numerical indicators. No worrying about misreading.

∗Ultra-modern styling

Lightweight and noiseless, easy-to-carry the CS-32A enhances modern office decors, upgrades working areas, increases efficiency.

CALCULATION EXAMPLES

CALCULATIONS
Addition, subtraction
Multiplication, successive multiplication
Division, successive division
Multiplication and division check (Recall multiplicand or dividend by touching [RC] key to check the results)
Rounding off (Multiplication & division)
Multiplication, division by constants
Product ± product
Exponent calculation
Square root extraction
Mixed calculation
Percentage calculation



EXAMPLES	STEPS
35.62−0.53−40.15=−5.06	[2] 35 • 62 = • 53 = 40 • 15 = ⇨−5.06
2.2×3.3×4.4×5.5=175.6920	[4] 2 • 2 × 3 • 3 = × 4 • 4 = × 5 • 5 = ⇨175.6920
−78×(−9.6)=748.80	[2] 78 = × 9 • 6 = ⇨748.80
256÷12÷0.56=38.095237	[6] 256 ÷ 12 = ÷ • 56 = ⇨38.095237
−87.2÷(−6.33)=13.77567140	[8] 87 • 2 = ÷ 6 • 33 = ⇨13.77567140
1.23×98.7=121.401(to be checked)	[4] 1 • 23 × 98 • 7 = (⇨121.401)
	[RC] (⇨98.7) ÷ = ⇨1.2300
3÷1=3(to be checked)	[0] 3 ÷ 1 = (⇨3) [RC] (⇨1) × = ⇨3(dividend)
0.14285×7=0.99995 (rounding off to the 5th decimal place)	[4] • 14285 × 7 = ⇨1.0000
In the case [K] key is used	
11.11×99.99=1110.8889	[K] [4] 11 • 11 × 99 • 99 = ⇨1110.8889
33.33×99.99=3332.6667	33 • 33 = ⇨3332.6667
44.44×99.99=4443.5556	44 • 44 = ⇨4443.5556
In the case [M2] key is used	[C] [M2] [CM] [4] 12 • 3 [M2] [M+] [C]
22.22×12.3=273.306	22 • 22 × [D=] ⇨273.3060
55.55×12.3=683.265	55 • 55 × [D=] ⇨683.2650
66.66×12.3=819.918	66 • 66 × [D=] ⇨819.9180
(123×0.55)+(43×0.76)=100.33	[C] [CM] [2] 123 × • 55 [M+] ⇨ 67.65
	43 × • 76 [M+] ⇨ 32.68
	[MR] ⇨100.33
$3^2=9$, $3^3=27$, $3^4=81$	[K] [0] 3 × = ⇨ 9
	= ⇨27
	= ⇨81
$\sqrt{53987}=232.3510275$	[8] 53987 ÷ = ⇨232.3510275
$\frac{\sqrt{(15)^2-(3.3\times4.2)}}{3.2\times1.68}=2.7029$	[C] [CM] [M2] [CM] [4] 15 × [M+] 3 • 3 × 4 • 2 [M−] [MR]
	÷ = [M2] [M+] 3 • 2 × 1 • 68 = ÷ [M2] [MR] [RC] = ⇨2.7029
52260 is divided into 56, 74, 92, 180 proportion	[C] [CM] [2] 56 = 74 = 92 = 180 = [M+] 52260 ÷ [MR]
	= [K] × 56 [RC] = ⇨ 7280.00
	74 = ⇨ 9620.00
	92 = ⇨11960.00
	180 = ⇨23400.00

IC

..... stable performance, greater versatility, less trouble, lower operation costs ··· the basic formula of a revolutionary development in electronic circuitry that

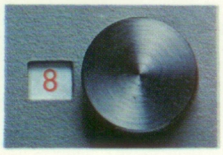
CHANGES EVERYTHING

First in Japan to employ IC (Integrated Circuit) in electronic desk calculators Sharp's new CS-32A takes the cue and leaps years ahead in compact design and versatility. The tiny IC board (about 1.5 mm× 2 mm) eliminates vast amounts of transistors, condensers, diodes and resistors and makes possible a calculator of briefcase dimensions with greater flexibility and function. Appreciably smaller yet more efficient than conventional electronic desk calculators, Sharp's CS-32A can instantly perform calculations up to 16 digits and eight decimal places. Fewer parts assure less trouble while a truly compact design makes the CS-32A feather light and easy to carry.

IC means greater stability with less trouble and lower operating costs.

Sharp's revolutionary CS-32A adds to this ultra-modern space age styling and perfomance backed by years of pioneering research and a world-wide reputation for integrity and customer satisfaction. The CS-32A is an allpurpose, easy-to-operate, electronic desk calculator ideal for general business, commercial, financial engineering and scientific use.

KEY DESIGNATION



Tabulation & Round off dial(0~8)

Specifies decimal places. Set red figure for rounding off. Set black figure for discarding.

Constant key

Used for carrying out calculations by constant. Push to lock the key. Push again to unlock the key.

Entry clear key

Clears figures mistakenly set.

Clear key

Clears figures indicated.

Numeral keys

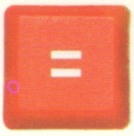
Decimal point key

Recall key

Exchanges the contents of No.1 register (on the display panel) with those of No.2 register.

Multiplication key

Orders multiplication. The key lamp turns on when the key is touched.



Red equal key

Orders subtraction. Also used for setting negative figures.

Division key

Orders division. The key lamp turns on when the key is touched.

Equal key

Derives sum, product, and quotient.

Memory recall key

Summons the contents of No. 1 memory. When touched after [M2] key is touched, the contents of No. 2 memory will be summoned in the display panel.

Memory plus key

Adds displayed figures to No. 1 memory. (no change in the display panel) When touched after [M2] key is touched, contents of No. 2 memory will be added to the displayed figures.

Memory minus key

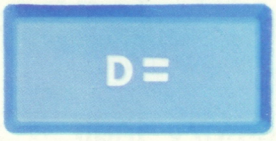
Subtracts displayed figures from No.1 memory. (no change in the display panel) When touched after [M2] key is touched, contents of No.2 memory are subtracted by displayed figures.

Clear memory key

Clears No. 1 memory. When touched after [M2] key is touched, No. 2 memory is cleared.

No.2 memory key

Orders No. 2 memory to function.



Dial equal key

For carrying out the calculations by constant. The constant is registered in No.2 memory.

No. 1 memory lamp

Turns on when the content is registered in No. 1 memory.

No. 2 memory lamp

Turns on when the content is registered in No.2 memory.

Overflow error lamp

Turns on when the results exceed the capacity.