

CITIZEN model TDS-2000 is a 12-digit desktop calculator specially designed with two big LCD displays. Just like a cash register, this innovative feature makes it possible for the 2nd person to share together with your calculating process more conveniently.

*** POWER SUPPLY** **English**

TDS-2000 is a dual-powered (high power solar + back-up battery) calculator operative under any lighting conditions.

-Auto power-off function-
The calculator switches the power off automatically if there has been no key entry for about 10 minutes.

-Battery change-
If the back-up battery needs to be changed, open the battery cover on lower cabinet to remove the old battery and insert a new battery in the indicated polarity. After changing battery, please use a pointed object to press the RESET hole near the battery. When you finish, replace the battery cover and secure the screw.

*** KEY INDEX** **English**

[ON/C] : Power on / Clear key [CE] : Clear entry key
[00•0] : Right Shift key [M-] : Memory minus key
[M+] : Memory plus key [+/-] : ±Sign change key
[MRC] : Memory recall key / Memory clear key
[%] : Percentage key [MU] : Mark-up / Mark-down key
[CHANGE] : ① Change calculation key ② To recall the amount to pay or the amount of change when pressing [CHANGE] key
[RATE] : Tax rate setting key
[^{TOR}TAX] : ① Price with Tax key
[^{RECALL}-TAX] : ② To store tax rate when pressing [RATE] and [+TAX] keys
[^{RECALL}-TAX] : ① Price without Tax key
[^{RECALL}-TAX] : ② To recall tax rate when pressing [RATE] and [-TAX] keys

A0123F Decimal place selection switch

- F - Floating decimal mode
- 0 -1-2-3- Fixed decimal mode
- A - ADD-mode automatically enters the monetary decimal in addition and subtraction calculations

↑ 5/4 ↓ Round up / Round-off / Round-down switch

The Signs Of The Display Mean The Following:
M : Memory TAX : Amount of tax
- : Minus (or negative) -TAX : Price excluding tax
+TAX : Price including tax RATE : Tax rate setting
% : Tax rate stored and recalled E : Overflow / Logic / Memory error
CHANGE : Amount of change

*** OPERATION EXAMPLES** **English**

1. Calculation Examples

Before performing each calculation, press the [ON/C] key two times.

Example	Key operation	Display
A0123F 2 x 3 = 6	2 [x] 2 [CE] 3 [=]	6.
7 x 9 = 63	7 [+] [x] 9 [=]	63.
300 x 27% = 81	300 [x] 27 [%]	81.
11.2 x 100% = 20%	11.2 [+] 56 [%]	20.
300+(300 x 40%)=420	300 [+] 40 [%]	420.
300-(300 x 40%)=180	300 [-] 40 [%]	180.
1400 x 12% = 168	1400 [x] 12 [%]	168.
6 + 4 + 7.5 = 17.5	6 [+] 4 [+] 7.5 [=]	17.5
5 x 3 + 0.2 = 7.5	[ON/C] 5 [x] 3 [+] 0.2 [=]	7.5
8 + 4 x 3.7 + 9 = 16.4	8 [+] 4 [x] 3.7 [+] 9 [=]	16.4
5 ² = 625	5 [x] [=] [=]	625.
1 / 2 = 0.5	1[+]2 [=] or 2 [+] [=]	0.5
$\frac{1}{(2 \times 3 + 10)} = 0.0625$	2 [x] 3 [+] 10 [+] [=]	0.0625
A0123F \$14.90+\$0.35-\$1.45+	1490 [+] 35 [-] 145	145.
↑ 5/4 ↓ \$12.05=\$25.85	[+] 1205 [=]	25.85

2. Memory Calculation

A0123F (12 x 4) - (20 + 2)	[MRC] [MRC] [ON/C]	0.
= 38	12 [x] 4 [M+] 20 [+] 2 [M-]	M 10.
	[MRC]	M 38.
	[MRC] [ON/C]	0.

3. Constant Calculation

A0123F 2 + 3 = 5	2 [+] 3 [=]	5.
4 + 3 = 7	4 [=]	7.
3 - 2 = 1	3 [-] 2 [=]	1.
2 - 2 = 0	2 [=]	0.
3 x 4 = 12	3 [x] 4 [=]	12.
3 x 6 = 18	6 [=]	18.
12 + 4 = 3	12 [+] 4 [=]	3.
24 + 4 = 6	24 [=]	6.

4. Overflow Error Clear

123456789012 x 10000	123456789012	123456789012.
= 1234.56789012 x 10 ⁷	[x] 100000 [00•0]	10000.
	[=]	E 1'234.56789012
	[ON/C]	0.

5. Price Mark-Up & Down Calculation

A0123F 2000+(P x 20%)=P	2000 [+] 20 [MU]	2'500.00
P = $\frac{2000}{1-20\%} = 2'500.00$	[MU]	500.00
↑ 5/4 ↓ 2500-2000 = 500.00		
2000-(P x 20%)=P	2000 [+] 20 [+/-] [MU]	1'666.66
P = $\frac{2000}{1-20\%} = 1'666.66$		
$\frac{18000 - 15000}{15000} \times 100\%$	18000 [-] 15000 [MU]	20.00
= 20.00%		

6. Tax Calculation

A0123F 100+TAX(3%) = 103	3 [RATE] [+TAX]	3.	%
Tax sum = 3	100 [+TAX]	103.	+TAX
	[+TAX]	3.	TAX
3 = Tax sum	103 = Tax inclusive value		
206-TAX(3%) = 200	[ON/C] [RATE] [-TAX]	3.	%
Tax sum = 6	206 [-TAX]	200.	-TAX
	[-TAX]	6.	TAX
	[CE]	0.	
6 = Tax sum	200 = Tax exclusive value		

7. Change Calculation

A0123F 100 + 20 = 120	100 [+] 20 [=]	120.
120 = the amount to pay		
500 - 120 = 380	500 [CHANGE] CHANGE	380.
500 = the amount given	380 = the change returned	
To recall the value to pay:	[CHANGE]	120.
This value is stored after performing [=] key.		
To recall the value of change:	[CHANGE] CHANGE	380.
This value is stored after performing [CHANGE] key.		
1000 - 120 = 880	1000 [CHANGE] CHANGE	880.
1000 = the amount given	880 = the change returned	
To clear the values	[ON/C]	0.

