

SPARE PARTS MASTER

MASTER

CASIO®
DC-810

OPERATION MANUAL
MANUAL DE OPERACION

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Thank you and congratulations on your selection of the Casio DC-810. This calculator lets you store telephone numbers and schedules, and features a handy watch function with alarm, all packed into a slim card design. Be sure to carefully read the instructions contained in this manual to get the most out of your new Casio Calculator.

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Precautions

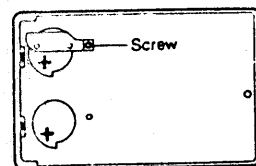
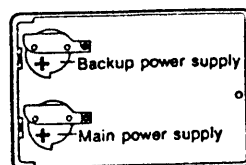
- Your calculator is constructed of precision electronic components. Do not expose it to temperature extremes, sudden temperature changes or strong impact. Also, do not bend or twist it.
- If the batteries go dead, remove it from the calculator as soon as possible. Also, be sure to replace the batteries every two years, regardless of how much you use the calculator. These simple precautions protect your calculator against serious damage due to leakage of battery fluid. Never expose batteries to high temperatures.
- Note that the manufacturer assumes no responsibility for any loss or claims by third parties which may arise from use of this product.
- Note that the manufacturer assumes no responsibility for any damages incurred as a result of data loss caused by malfunction, repairs or battery replacements. The user should prepare physical records of important data to protect against such data losses.
- Always perform calculations by pressing the correct keys while monitoring results on the display.

The Power Supply

Your calculator is powered by two lithium batteries (CR2016), one for the **main power supply** and one for the **backup power supply**. The main power supply battery provides power for normal operations, while the backup power supply protects memory contents.

As battery power of the main power supply decreases, the display of the calculator will become dim and difficult to read. Replace this battery as soon as possible once these symptoms occur. You should replace the main power supply and backup power supply battery at least once every two years.

Replacing batteries



1. Loosen the screw securing the back cover of the calculator, and carefully remove the back cover. Note the two batteries inside of the calculator.
2. With the calculator positioned as illustrated so that the two batteries are on the left, the backup power supply battery will be on above the main power supply battery. Both batteries are secured in place by a metal battery holder.
3. Remove the screw of the battery holder you wish to replace, and remove the battery holder. Press down on the battery and slide it out from the plastic lip that also serves to hold it in place.

4. Wipe off a new battery with a dry cloth to allow proper contact, and then load it into the calculator. Place the battery into position, and slide it under the plastic lip while pressing down on it lightly.
5. Replace the battery holder, making sure that the tip on the end opposite that with the screw hole fits into the groove provided.
6. Secure the battery holder in place by tightening its screw while pressing down.
7. Replace the back cover of the calculator and secure it in place by tightening its screw.


Important

- Memory contents are cleared when both the main power supply battery and backup power supply battery are removed at the same time. Be sure to leave one of the batteries in place to protect memory contents.
- If you remove the main power supply battery for a long period, memory contents may be damaged. If this should happen, clear the memory contents using the RESET operation described on page 47.
- Keep batteries out of the reach of small children. If swallowed, consult a physician immediately.
- The life of the original batteries supplied with the unit is calculated from the date of installation at the factory, not from the date of purchase.

Auto Mode Change

The calculator automatically changes to the time display from any other display if you do not perform any key operation for approximately six minutes. If you are in the middle of entering new data or editing data already stored in memory, and don't perform a key operation for six minutes, the calculator automatically changes to the time display without storing any data that is partially entered or changed.

Controlling the Key Input Tone

The key input tone can be used for audible confirmation of proper key entry. Press the  key in the Alarm mode (see page 42) to switch the key input tone ON and OFF.

The Telephone Number Storage Function

This function lets you store up to 100 data items consisting of eight alphabetic characters and symbols, and a number up to 36 digits long. You can protect confidential information using the secret password function described on page 33.

- Though each number can have 36 digits, note that the 100 data item capacity is calculated according to a standard telephone number length of 12 digits.
- The amount of memory available for telephone number storage is less than 100 data items when schedule data are also stored in memory.

Inputting Telephone Data

Press the **[F]** key and the display should appear as illustrated. Note the figure of a telephone. This indicates that the calculator is in the TEL mode. If you are using your calculator for the first time, or if you have recently cleared the memory, the words "NO ENTRY" will also be shown on the display. This indicates that there is nothing in the TEL mode memory.

NO ENTRY

TEL mode

Display indicates that nothing is contained in memory.




The illustration below shows the TEL mode display, with its **character portion** and **numeric portion**. The character portion can hold up to eight alphabetic characters, symbols and numbers, while the numeric portion can hold up to 36 digits (though 12 digits is considered to be standard).


Character portion (eight characters maximum)




Numeric portion

(12 digits standard
36 digits maximum
12-digit display)

- The numeric portion of the display begins on the top line, to the right of the character portion. After you enter the first four digits of the number, the cursor automatically moves down to the first (far left) digit of the second line.
- The display capacity of the numeric portion is 12 digits. You can view numbers longer than 12 digits by scrolling the display left and right using the  and  keys.
- Press the  key. At first, the display will show the number of data items currently stored in memory (for about one second). Then the prompt "NAME ?" appears to ask you to enter a name.

 CAPACITY
 0 - 100





 NAME ?
 "

The message "FULL" appears on the display if 100 data items (total of TEL mode items and SCHEDULE mode items) are already stored in memory. This message means that no more memory area is available. At this time, delete any data items (telephone or schedule) that you no longer need (see pages 21 and 30).

FULL
 100 - 100

Inputting Data in the TEL Mode

Enter characters, symbols and spaces by pressing the corresponding keys on the calculator. Press the  key to store the entered characters into memory. Note that each key on the calculator is marked with two symbols. This means that a single key can be used to input two different characters. The character input by the key is determined by the calculator's **input mode**. Each time you press the  key, the input mode switches between the ALPHA mode and NUMERIC mode.

ALPHA	1	2	3	4	5	6	7	8	9	0	MAC	ENT
A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
SPACE												

Example:

ALPHA mode — B
NUMERIC mode — 7

<Inputting the Character Portion>

You can input alphabetic characters, numbers, symbols (period, hyphen), and spaces into the character portion of the display.

- Press the **ALPHA** key to enter the ALPHA mode. Confirm that the **A** mark is shown on the display. If not, press **ALPHA** key again.
- Press the key that shows the character that you wish to input at the current cursor position. When you press a key, the corresponding character appears on the display, and the cursor automatically shifts one space to the right.
- After you have input all of the characters that you want, press the **ENT** key.

<Inputting the Numeric Portion>

You can input numbers, hyphens, and spaces only into the numeric portion of the display.

- Complete input into the character portion by pressing the **ENT** key (as described above). The prompt "NUMBER ?" appears on the display and the cursor blinks at the first digit of the numeric portion of the display.

NUMBER ? -

- Press the key that shows the number that you wish to input at the current cursor position. When you press a key, the corresponding number appears on the display, and the cursor automatically shifts one space to the right.
- After you have input all of the numbers that you want, press the **ENT** key. The display will again show the "NAME ?" prompt to signal that it is ready for input of the next data items.

NAME ?

4. After you have finished inputting telephone data, press the **AC** key or **CE** key.

Example: CASIO 045-012-3456 4567

Character portion

Numeric portion

When you reach the 12th digit of the numeric portion, each time you input additional digits, the numeric portion shifts one digit to the left. Though this causes the beginning of the number to scroll off of the display, the entire number is stored in memory.

CASIO 045.
012-345_

(Number shifts to the left)

CASIO 45.0
12-3456_

→

CASIO 2.34
56 4567_



Finding Out Remaining Memory Capacity


The amount of memory used for one data item differs according to the length of its numeric portion.

Numeric portion	Memory used
12 characters or less	1 item
13 - 24 characters	15 items
25 - 36 characters	2 items

- Spaces and hyphens are counted as characters.
- The total capacity of the TEL memory is 100 data items max. when the numeric portion of all data items is 12 characters or less. If all items are 25 - 36 characters, total capacity becomes 50 items.

Displaying the Number of Items stored

To show the number of data items stored (including those in the schedule area and the secret area, see pages 22 and 33), press the  key while data is displayed or while the message "SET" is shown on the display. This display remains as long as the  key is depressed.

 CAPACITY
10-100

- This display would appear both for 10 items with numeric portions up to 12 digits long, and for 5 items with numeric portions 25-36 digits long.
- Fractional portions of used memory are rounded up to the nearest whole number.

Automatic Sorting








The calculator automatically sorts data item alphabetically according to their character portions. Items are sorted in the following sequence:
Space, Hyphen, Period, Numbers 0-9, Alphabetic characters (A-Z)

Recalling Telephone Data Items

You can locate and recall data items by using one of two methods: **sequential search** and **initial search**.

Using Sequential Search

Sequential search lets you scroll through the data until you find the specific data item that you want.

1. Press the  key to display the first (in alphabetical order, see page 16) data item.
 2. Each time you press the  key or  key the calculator will scroll to the next sequential data item.
 3. To scroll back to a data item that you have already pressed, press the  key.
- If you hold down the , , or  key, the calculator will scroll through the data at high speed.

Example: Recall the telephone number for Casio that was stored in a previous example.

CASIO 045-
012-3456

- The ► symbol on the display indicates that there is more data off of the right side of the display. Press the [C] key to scroll the display and view the data to the right. Each time you press [C], the display scrolls one digit to the right.
- After you have scrolled the screen to the left, you can scroll back to the right by pressing the [D] key.
- If you hold down the [C] or [D] key, the calculator will scroll left/right at high speed.

Using Initial Search

With initial search, you enter the characters of the data item you want to find, and the calculator automatically locates and displays all items that contain the characters you enter. You can enter a single character, multiple characters, or an entire name when using initial search.

1. Press the [F] key to display the first (in alphabetical order, see page 16) data item.
 2. Enter the letters, numbers or symbols for the data item you wish to locate. Remember to first use the [M] key to select the correct input mode (see page 11).
 3. Press the [F] key to begin the search.
- If multiple data items match the characters you specify, you can scroll through them using the sequential search procedure (see page 17).
 - If none of the data items stored in memory match the characters you enter, the message "NO ENTRY" appears on the display.

Correcting Telephone Data Item

When you enter data into the calculator, it is not actually put into memory until you press the [M] key. The procedure you should use to correct a data item depends on if the correction is made while you are entering the item (before you press [M]) or if it has already been stored in memory (by pressing [M]).

• Before [M]

1. Use the [C] and [D] keys to move the cursor to the location of the character to be changed.

2. Press the letter or number key that corresponds to the change you want to make.
3. After making sure that the data item is correct, press the **[F4]** key to store it into memory.

• **After **[F4]****

1. Press the **[F2]** key to enter the TEL mode.
2. Press the **[F4]** key.
3. Use either sequential search or initial search to locate the data item to be corrected.
4. Press the **[P]** key to automatically locate the cursor at the beginning of the character portion of the data item, or the **[Q]** key at the end of the character portion.
5. Use the **[P]** and **[Q]** keys to move to the position of the change and press the correct character or number key to make the change. Then press the **[F4]** key. If you do not wish to change the character portion of the data item, press the **[F4]** key to move on to the numeric portion.
6. The cursor will first be displayed at the first digit of the number. Use the **[P]** and **[Q]** keys to move to the digit to be changed and press the correct number key to make the change. Then press the **[F4]** key. If you do not wish to change the numeric portion of the data item, press the **[F4]** key.

Deleting Telephone Data

• **Deleting the Entire Data Item**

The following operation deletes the entire data item, including the character portion and the numeric portion

1. Press the **[F2]** key to enter the TEL mode.
2. Press the **[F4]** key.
3. Use either sequential search or initial search to locate the data item to be deleted.
4. Press the **[P]** key or the **[Q]** key.
5. Press **[F4]** **[F4]** to delete the currently displayed data item. At this time the prompt "NAME ?" will appear on the display.

• **Deleting the Numeric Portion Only**


The following operation deletes only the numeric portion of a data item.


1. Press the **[F2]** key to enter the TEL mode.
2. Press the **[F4]** key.
3. Use either sequential search or initial search to locate the data item to be deleted.
4. Press the **[P]** key or the **[Q]** key.
5. Press **[F4]** **[F4]** to delete the numeric portion of the currently displayed data item. At this time the prompt "NAME ?" will appear on the display.

Schedule Function


The Schedule Function of your calculator lets you store a maximum of 100 schedule items (total of schedule items and telephone data items). When a schedule date and time arrives, a message up to eight characters long appears on the display and a buzzer sounds for 20 seconds.

Inputting Schedule Data

Press the  key and the display should appear as illustrated. Note the figure of a clock. This indicates that the calculator is in the SCHEDULE mode. If you are using your calculator for the first time, or if you have recently cleared the memory, the words "NO ENTRY" will also be shown on the display.


 NO ENTRY

SCHEDULE mode
Display indicates that nothing is contained in memory.

1. Press the  key. At first, the display will show the number of data items currently stored in memory (for about one second). Then the prompt "SCHD ?" appears to ask you to enter a schedule item.

 CAPACITY
0 - 100
Initial display

→

 SCHD ? 1 - 1
10:00 AM



NOTE

The default setting is 10.00AM of the current date. Scheduled times are displayed according to the current time format setting (12-hour/24-hour) of the calculator. You can switch between formats using the procedure described on page 41.

The message "FULL" appears on the display if 100 data items (total of TEL mode items and SCHEDULE mode items) are already stored in memory. This message means that no more memory area is available. At this time, delete any data items (telephone or schedule) that you no longer need (see pages 21 and 30).

FULL
100-100


Inputting Data in the SCHEDULE Mode




Enter characters, symbols and spaces by pressing the corresponding keys on the calculator. Press the  key to store the entered characters into memory. Note that each key on the calculator is marked with two symbols. This means that a single key can be used to input two different characters. The character input by the key is determined by the calculator's **input mode**. Each time you press the  key, the input mode switches between the ALPHA mode and NUMERIC mode.

AMPN	7	8	9	+	MC	CLR
A	B	C	D	E	F	G
H	I	J	K	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z	SPACE	

Example:  ALPHA mode — B
NUMERIC mode — 7

Inputting Numbers

After you finish inputting characters by pressing , the calculator prompts you to enter the date and time of the schedule item. Perform the following steps to enter the appropriate data.

1. Enter a value for the month, press the  key and enter a value for the date in answer to the prompt "DATE ?" that appears on the display.
Example: Enter 6  10 for June 10th.
2. Press the  key.

- SCHED ? 1. 1 ③
NET 10:00 AM

- Example:** To input a schedule for a party at 6 30PM on June 12th.

Text Month Date Hour Minutes

GO PARTY 6-12
6:30

Automatic Sorting

Automatic Sorting
The calculator automatically sorts schedule data items in memory according to month, date, hour and minutes.

NOTE
Schedules can be stored for any date within one year from the current date. If today's date were August 5, you could store schedules for any date from August 5 this year through August 4 of next year.

You can locate and recall data items by using one of two methods: **sequential search** and **month data search**.

Using Sequential Search

Sequential search lets you scroll through the data until you find the specific data item that you want.

1. Press the **[F1]** key to display the first (in chronological order, see page 27) data item.
 2. Each time you press the **[F2]** key or **[F3]** key the calculator will scroll to the next sequential data item.
 3. To scroll back to a data item that you have already passed, press the **[F4]** key.
- If you hold down the **[F2]**, **[F3]**, or **[F4]** key, the calculator will scroll through the data at high speed.

Using Month Data Search

With month data search, you enter a value that represents the month you want to recall, and the calculator automatically displays the first data item stored for that month.

1. Press the **[F5]** key to put the calculator mode ("0.") should be shown on the display).
2. Enter the number for the month you wish to recall (1 - 12).
3. Press the **[F6]** key to display the first data item for the month you specified.

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- If multiple data are stored for the month you specify, you can scroll through them using the sequential search procedure (see page 28).
- If nothing is stored in memory for the month you specify, the message "NO ENTRY" appears on the display.

Correcting Schedule Data Item

As with telephone data, the procedure you should use to correct a schedule data item depends on if the correction is made while you are entering the item (before you press **[F7]**) or if it has already been stored in memory (by pressing **[F7]**).

- **Before [F7]**

 1. Use the **[F8]** and **[F9]** keys to move the cursor to the location of the character to be changed.
 2. Press the letter or number key that corresponds to the change you want to make.
 3. After making sure that the data item is correct, press the **[F7]** key to store it into memory.

• After **[F4]**

1. Press the **[F2]** key to enter the SCHEDULE mode.
2. Press the **[F4]** key.
3. Use sequential search to locate the data item to be corrected.
4. Press the **[F2]** key to automatically locate the cursor at the beginning of the text of the data item, or the **[F4]** key at the end of the text.
5. Use the **[P]** and **[N]** keys to move to the position of the change and press the correct character or number key to make the change. Then press **[F4]** key. If you do not wish to change the text of the data item, press the **[F4]** key to move on to the month/date/time.
6. The cursor will first be displayed at the first digit of the month. Use the **[P]** and **[N]** keys to move to the digit to be changed and press the correct number key to make the change. Then press **[F4]** key. If you do not wish to change the month/date/time of the data item, press the **[F4]** key.

Deleting Schedule Data

1. Press the **[F2]** key to enter the SCHEDULE mode.
2. Press the **[F4]** key.

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3. Use sequential search to locate the data item to be deleted.
 4. Press the **[P]** key or the **[N]** key.
 5. Press **[F2]** **[F4]** to delete the currently displayed data item. At this time the prompt "SCHD ?" will appear on the display.
- The **[F2]** key cannot be used and so data items cannot be deleted while the cursor is located within the date or time of a schedule data item.
 - You can also delete a schedule data item by changing all eight characters of the text portion to blank spaces and pressing the **[F4]** key.

Displaying the Number of Items Stored

Press the **[F4]** key while a schedule item is displayed to or while the message "SET" is shown on the display show the number of data items stored (including telephone data, schedule data, and secret area data). This display remains as long as the **[F4]** key is depressed.

CAPACITY 10 - 100

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The Schedule Alarm

When the year, month, date, hour and minute of a schedule item is reached, a message appears (only on the time display) and an alarm sounds for 20 seconds.



SUN '88 6-12
6:29.59 PM

Display before schedule alarm

PARTY 6-12
6:30.21 PM

Display following schedule alarm

- You can switch the schedule alarm OFF while it is sounding by pressing any of the keys on the calculator.
- The schedule alarm will not operate while you are setting the time or entering a schedule.




Except for when the alarm sounds while the calculator is displaying the time, the schedule message will be shown when you change to the time display by pressing the  key (or when the calculator automatically switches to the time display). To clear the schedule message, press the  key or change the mode of the calculator.


- The schedule message is not shown on the display for alarms that sound for schedules stored in the secret area. In this case, eight question marks appear in place of the schedule message.

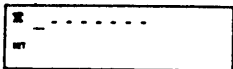
Secret Function

Once you assign a secret password (up to eight characters long), any telephone or schedule data stored in the secret area cannot be viewed by anyone who does not know the password.

Registering a Password

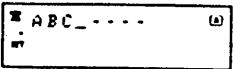
1. Press the  key to enter the TEL mode, or the  key for the SCHEDULE mode.
2. Press the  key.


3. Press the  key to register the password.

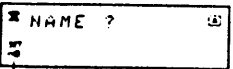


4. Enter the desired password. You can use letters, numbers or symbols.

Example: Enter the password "ABC".





5. Press the  key.







Secret symbol

IMPORTANT

Be sure to remember your password. Should you forget it, you will have to reset the calculator and register a new password. Remember, however, that this also clears all memory contents.

6. Use the procedures described for TEL mode (page 11) and SCHEDULE mode (page 24) input to enter the appropriate data.
- After you finish inputting to the secret area, be sure to always press the  or  key to return to the open (non-secret) area.
- Only one password can be registered at one time.









Recalling Data From the Secret Area



1. Press the  key to enter the TEL mode, or the  key for the SCHEDULE mode.
2. Press the  key to register the password.
3. Enter the password you registered previously ("ABC" in the previous example).
4. Press the  key to display the first data item in the selected (TEL or SCHEDULE) secret area.



- If you enter the wrong password, the calculator will simply wait for you to enter a password again. Enter the correct password.
- 5. Recall data using normal procedures.
- Perform the same procedure to enter the password to add, correct or delete data items stored in the secret area.

Changing the Password

Use the following procedure to change your current password to another one.

1. Press the  key to enter the TEL mode, or the  key for the SCHEDULE mode.
2. Press the  key to register the password.
3. Enter the password you registered previously ("ABC" in the previous example).
4. Press   to display the current password.
5. Press the  or  key.
6. Enter the new password.
7. Press the  key.

Generally, pressing the  key while you are in the secret area will return to the open area. In the following cases (while in the secret area), however, pressing the  key will display the current password.

- While "NAME ?", "NUMBER ?" or "FULL" is displayed in the TEL mode after you press the  key.
- While "SCHED ?", "DATE ?", "TIME ?" or "FULL" is displayed in the SCHEDULE mode after you press the  key.

Time function





Your calculator comes equipped with a versatile digital timepiece, complete with a fully automatic calendar and 12-hour/24-hour formats.


SUN	'88	6.5
10:10	12 ^{am}	

Setting the Clock and Calendar





• Setting the Seconds

Use the following procedure to set the seconds at "00" on the sounding of a time tone (over the radio, TV, or telephone).

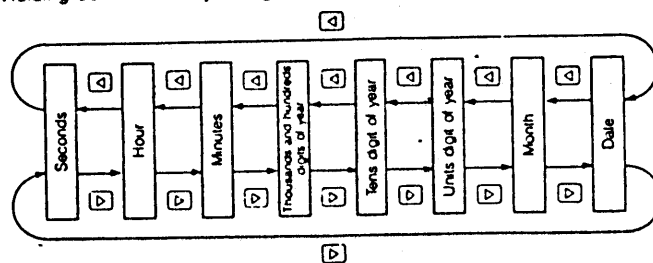
1. Check to see that the calculator is displaying the current time. If not, press the  key.
2. Hold down the  key for about two seconds until the seconds digits flash.
3. Press the  key on a time tone to set the seconds to "00".
4. Press the  key to stop the seconds from flashing.


- If the current seconds count is in the range of 00 ~ 29 when you press the  key, the seconds are made "00" without affecting the minutes. In the range of 30 ~ 59, the seconds are made "00" and the minutes are advanced by 1.

• Setting the Clock and Calendar







1. Check to see that the calculator is displaying the current time. If not, press the  key.
2. Hold down the  key for about two seconds until the seconds digits flash.
3. Press the  and  keys to change the digits to be set (the flashing digits) as illustrated below.





- Holding down either key changes at high speed.



4. When the digits you wish to set are flashing, press the appropriate keys to enter the desired numbers.
- The day of the week is adjusted automatically to match the month/date setting.
5. To complete the setting, press the  key.




Example: To set an alarm time of 8:05 PM.

Operation	Display
Press  .	AL-PM 12:00
* Press  .	AL-PM 12:00
Enter hour and minutes. 8  05	AL-PM 8:05
Specify PM. 	AL-PM 8:05
Press  to store.	AL-PM 8:05
Press  to complete.	AL-PM 8:05

- If you make a mistake during the setting procedure, simply return to the location of the error using the  and  keys, and correct as required.
- Each time you press the  key, the setting changes between AM and PM.
- The alarm time follows the same format (12-hour/24-hour) specified for the time (see page 41).
- You can test the alarm by holding down the  key while in the SCHEDULE or ALARM mode.

Switching the Alarms ON and OFF

You can switch th schedule alarm, daily alarm and hourly tone ON and OFF individually.

Alarm	Key
Schedule	
Daily	
Hourly	

Example: Setting June 10, 1988; 8:25PM.

Operation	Display
Time display.	10:59 05
Press [M] key for two seconds.	10:59 07
Press [D] key.	10:59 10
Enter hour. 8	8:59 13
Enter minutes. [D] 25	8:25 18
Enter year, month, and date. [D] [D] [D] 6 [D] 10	8:25 38

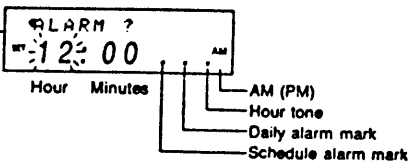
Operation	Display
Specify PM. [P]	8:25 41
Press [M] key to complete.	8:25 45

- If you make a mistake during the setting procedure, simply return to the location of the error using the **[D]** and **[D]** keys, and correct as required.
- The fully automatic calendar automatically makes adjustments for differing month lengths and leap year.
- You can set the calendar within the range of January 1, 1901 through December 31, 2099.
- Each time you press the **[M]** key while the time is displayed, the calculator switches between 12-hour and 24-hour format.
- While the thousands digit is flashing during year input, pressing 1 automatically registers the 20th century (19xx), while 2 registers the 21st century (20xx). At this time, the cursor move to the tens digit for further input.

Alarm Function

The alarm can be set to the exact hour and minute. When a preset time arrives, an electronic buzzer sounds for 20 seconds. You can also set the timepiece of the calculator to sound a double beep every hour on the hour.

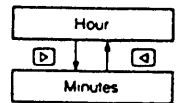
- The alarm setting format (12-hour/24-hour) always matches the current specification for the time display.



Setting the Alarm

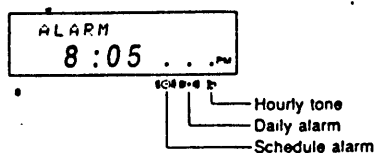
- Press the key while the time is displayed.
- Press the key. At this time, the hour digits should start to flash.
- Press the appropriate keys to enter values for the hour setting.
- Press the key to move to the minute digits.
- Press the appropriate keys to enter values for the minute setting.

- You can switch between the hour digits and minute digits at any time using the and keys.



- Press the key to enter the setting into memory.*
 - Press the key to complete the alarm setting procedure.
- Be sure to press the key before the key. Otherwise, the new data is not stored in memory.

Each time you press one of these keys, the corresponding alarm is switched ON or OFF. An alarm is ON when its symbol (•) is shown on the display.

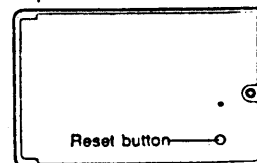


When multiple alarms are set for the same time, they should in the following order of precedence:
schedule alarm, daily alarm, time tone, monitor alarm

Resetting the Calculator

Be sure to note that when you **reset** the calculator, everything stored in memory is **erased**.

1. Press the reset button on the back of the calculator with a thin, pointed object.
2. The message "RESET ?" will appear on the display to confirm whether or not you really wish to reset the calculator and erase all of the memory contents. If you wish to do so, **press the key**. If you wish to cancel the RESET operation without erasing the contents of the memory, press any of the key except the key.
3. The display will show "0.", indicating that all data has been erased from memory.



- When you reset the calculator, the following values are reset as indicated:
 Year: 1988 Format mode: 12-hour
 Month: January (1) Input mode: Character
 Date: 1 Alarms: 12:00 midnight; all OFF
 Time: 12.00 midnight

Calculations

- Press the **AC** key to specify the CAL mode.
- The following indicators also appears on the display:
 M: Indicates that a value is stored in the independent memory.
 K: Indicates that a constant calculation is being performed.
 E: Indicates that an error has occurred*.
- You can clear an error and continue with the current calculation by pressing the **CE** key. You can clear the error along with the current calculation by pressing the **AC** key.

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Corrections

- Clear the last numeric entry by pressing the **CE** key immediately after making the initial entry.
- You can correct the last arithmetic operator entry (**+**, **-**, **x**, **÷**) by pressing the correct arithmetic operator key immediately after making the initial entry.
- Press the **AC** key to clear an entire calculation.
- Pressing the **MC** (memory clear) key clears memory contents.

Calculation Examples

Examples	Operation	Display
53+123-63=	53 + 123 = 63 CE	0.
963 x (23-56)=	23 - 56 x 963 =	113.
(56 x 3-89) ÷ 5.2+63=	56 x 3 = 89 - 5.2 ÷ 63 +	- 31779.
123456 x 741852=	123456 x 741852 =	78.192307
	CE	E 915.86080
	AC	915.86080
		0.

$$\begin{aligned} \sqrt{3} \times 5 &= \\ 12 + 23 &= \\ 45 + 23 &= \\ 78 \div 23 &= \\ 7 - 5.6 &= \\ 2 - 5.6 &= \end{aligned}$$

$$\begin{aligned} 23 \times 12 &= \\ 45 \times 12 &= \\ 45 \div 9.6 &= \\ 78 \div 9.6 &= \end{aligned}$$

12% of 1500
Percentage of 660 against 880
15% add-on of 2500

$$\begin{aligned} 3 \div 5 &= \\ 23 \div 12 &= \\ 45 &= \\ 78 &= \\ 5.6 \div 7 &= \\ 2 &= \end{aligned}$$

$$\begin{aligned} 12 \times 2.3 &= \\ 4.5 &= \\ 9.6 \div 45 &= \\ 78 &= \end{aligned}$$

$$\begin{aligned} 1500 \times 12 &= \\ 660 \div 880 &= \\ 2500 \times 15 &= \end{aligned}$$

8.660254

$$\begin{aligned} K &= 35. \\ K &= 68. \\ K &= 101. \\ K &= 1.4 \\ K &= -3.6 \end{aligned}$$

$$\begin{aligned} K &= 27.6 \\ K &= 54. \\ K &= 4.6875 \\ K &= 8.125 \end{aligned}$$

$$\begin{aligned} 180. \\ 75. \\ 2875. \end{aligned}$$

25% discount of 3500

What will the selling price and profit be when the purchasing price of an item is \$480 and the profit rate to the selling price is 25%?

If you made \$80 last week and \$100 this week, what is the percent increase?

$$\begin{aligned} 80 \times 9 &= 720 \\ -) 50 \times 6 &= 300 \\ \hline 20 \times 3 &= 60 \\ 480 \end{aligned}$$

$$\begin{aligned} 3500 \times 25 &= \\ 480 \div 25 &= \end{aligned}$$

$$\begin{aligned} 2625. \\ 640. \\ 160. \end{aligned}$$

$$100 \div 80 =$$

$$25.$$

$$\begin{aligned} 80 \div 9 &= \\ 50 \div 6 &= \\ 20 \div 3 &= \end{aligned}$$

$$\begin{aligned} M &= 720. \\ M &= 300. \\ M &= 60. \\ M &= 480. \end{aligned}$$

Specifications

Model: DC-810

Telephone storage function:

- Memory storage of up to 100 data items (8 alphabetic characters or numbers and 12 numbers (36 numbers max.) per item); secret function; auto sort function

Schedule storage function:

- Memory storage of up to 100 sets of schedule data (8-character message, month, date, hour, minutes); secret function
- A combined total of up to 100 data items may be stored in TEL mode and SCHEDULE mode.

Watch function:

Average of accuracy ± 3 seconds per day under normal temperatures; hour, minute, second, year, month, date, day display; full automatic calendar

Alarm function:

Schedule alarm set in month, date, hour and minutes; Daily alarm set in hour and minutes; 20-second electronic buzzer; hour tone

Calculator function:

8-digit arithmetic calculations; independent memory; 16-digit approximations; function command signs

General

Main component: LSI

Power supply: Lithium battery (CR2016) $\times 2$

Power consumption: 0.0066 W

Battery life: Approximately one year

Ambient temperature range: $0^{\circ}\text{C} - 40^{\circ}\text{C}$ ($32^{\circ}\text{F} - 104^{\circ}\text{F}$)

Dimensions: 3.9 (H) \times 85.5 (W) \times 54.5 (D) mm
($1/8$ " (H) \times $3 3/8$ " (W) \times $2 1/8$ " (D))

Weight: 32 g (1.1 oz) (including batteries)