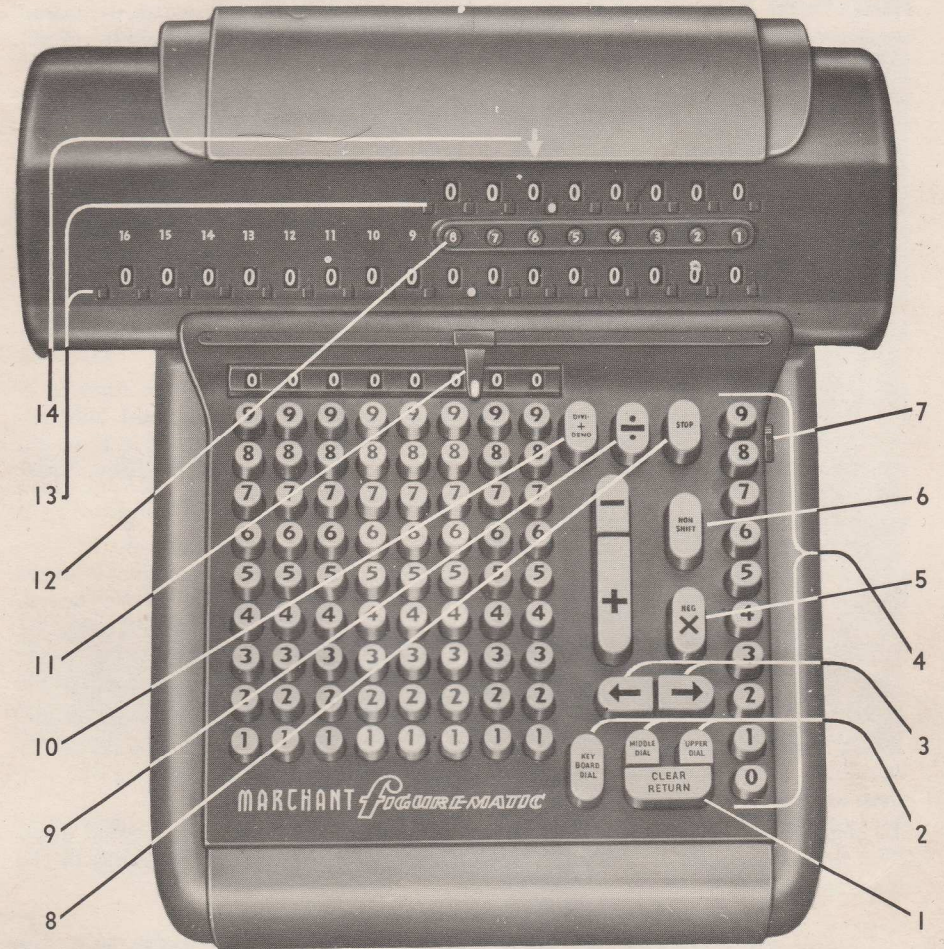


SIMPLE INSTRUCTIONS for the easy operation of your

MERCHANT *FIGUREMATIC* CALCULATOR

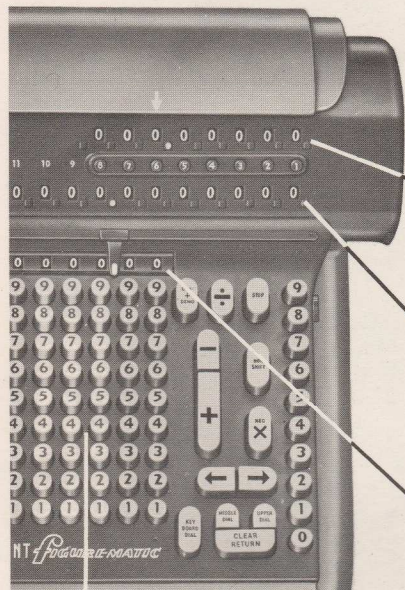


MODEL ADX

- | | |
|---|--|
| 1 CLEAR-RETURN KEY
Clears Carriage dials and simultaneously returns Carriage to Tab-Set position. | 8 OPTIONAL DIVISION STOP
Also releases Non Shift and Neg \times Keys. |
| 2 ELECTRIC DIAL-CLEARANCE
Operate together or independently. | 9 AUTOMATIC DIVISION |
| 3 ELECTRIC CARRIAGE-SHIFT | 10 DIVIDEND + KEY
Automatically clears Carriage dials, positions Carriage, enters dividend, and clears Keyboard Dials. |
| 4 AUTOMATIC MULTIPLIER KEYS | 11 KEYBOARD DIAL DECIMAL POINTER |
| 5 NEGATIVE MULTIPLICATION | 12 TABULATOR
Any one or more keys can be set at once. To release all Tab Keys, touch Tab Key "8". |
| 6 NON SHIFT
Holds Carriage stationary when Multiplier Key is touched. | 13 EASY PRE-SET DECIMALS
White markers for each dial. Open with flip of finger. |
| 7 MANUAL UPPER DIAL CONTROL
Normal position away from operator. | 14 ACTIVE-DIAL INDICATOR |

Marchant has three dials . . .

... true figure dials for all factors, including Keyboard entry. Each and every operation performed on the calculator is recorded in one or more of these three dials, which thus provide proof for every factor.



UPPER DIALS record the Multiplier in Multiplication; the Answer in Division; the Count of Items in Addition or Subtraction.

MIDDLE DIALS record the Answer in Multiplication, Addition, and Subtraction; and show the Dividend in Division (before dividing) and the Remainder in Division after dividing.

KEYBOARD DIALS show in a *straight line* every figure entered in the Keyboard.

KEYBOARD

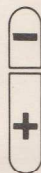
Touch several keys in the Keyboard and notice that these figures show instantly in the Keyboard Dials, where they remain for easy checking throughout the problem.

Marchant has a positive, flexible Keyboard, which prevents the setting of more than one key in the same column at the same time.

To change any figure set in the Keyboard Dials, simply touch the desired digit. The previous figure is instantly cleared and the desired figure appears in the Keyboard Dials.

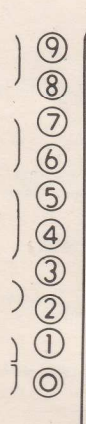
ADDITION and SUBTRACTION CONTROLS

Enter the figures in the Keyboard and check the entry in the Keyboard Dials. To add—touch the Add Bar. To subtract—touch the Subtract Bar.



AUTOMATIC MULTIPLIER KEYBOARD

Enter the Multiplier in this Automatic Multiplier Keyboard as you read the figures, from the left. For example, if the Multiplier is 7468, touch the 7, the 4, the 6 and the 8. Your Marchant will accept the figures as fast as you enter them. Proof of accuracy of this entry is in the Upper Dials.



NON-SHIFT CONTROL

Prevents the Carriage from shifting when a Multiplier Key is touched. To release, touch the control marked STOP.



NEGATIVE MULTIPLICATION



Used most frequently to subtract a Product from an amount already in the Middle Dials. To release, touch STOP Key.

AUTOMATIC DIVISION CONTROLS



A touch of the DIVIDEND + Key automatically clears Carriage dials, tabulates Carriage, enters dividend from Keyboard Dials into Middle Dials and clears Keyboard.



After the dividend and divisor have been entered, touch the DIVISION Key. Automatic division gives clearance of Upper Dials prior to division, and clearance of Keyboard Dials at end of division operation.

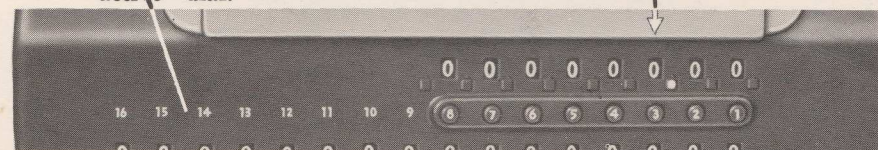


The STOP Key will stop the calculator during a division in any position.

CARRIAGE POSITIONING

The numbers on the Carriage and Tab Keys are used to identify the Carriage Position. The ACTIVE DIAL INDICATOR (Orange-colored Arrow) indicates the Carriage position, and the "active" dial.

Example: When this Arrow is pointing to the 3rd dial (see below), the Carriage is said to be in Position 3; any dial action will begin in this "active" dial.

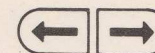


TABULATOR AND CLEAR-RETURN

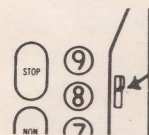
Tab Keys are used in multiplication and division. Any one or more keys may be set at once. A touch of the CLEAR-RETURN Key clears the Carriage dials and returns the Carriage to the position indicated by the tab setting.

ELECTRIC CARRIAGE SHIFT

These keys electrically move the Carriage to the right or left. The Arrow indicates in which direction the Carriage will move. (To shift Carriage into position indicated by tab setting, hold down proper Shift Key until Carriage stops.)



MANUAL UPPER DIALS CONTROL



Normal position of this control is *away* from you. When this control is *toward* the operator, the Upper Dials figures show in complementary form.

COMPLETE CARRIAGE CARRY-OVER

You know the answer is right, because Marchant's smoothly flowing Carriage mechanism makes every dial active regardless of Carriage Position. It doesn't matter *how* you operate your Marchant—no dead dials—a Marchant calculator *cannot* drop figures from dials, because every Marchant has Complete Carriage Carry-over.

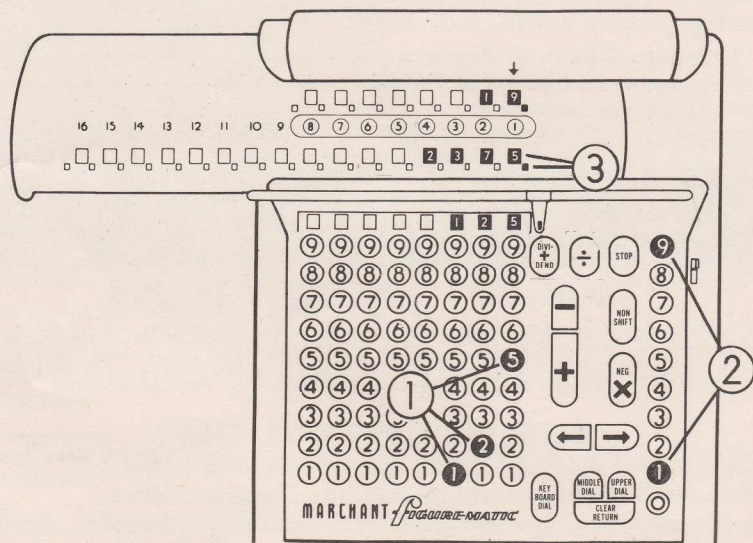
AUTOMATIC SIMULTANEOUS "PUSH-BUTTON" MULTIPLICATION

The word "simultaneous" emphasizes the outstanding difference between Marchant's exclusive "Live-Key" Multiplication and the delayed action multiplication offered by others. "Simultaneous" multiplication means that Marchant actually multiplies *while the operator is entering the multiplier figures!* It is the simplest and fastest mechanical multiplication known.

EXAMPLE: $125 \times 19 = 2375$

- ① Enter the first amount (Multiplicand, 125) in the Keyboard Dials.
- ② Now enter the second amount as you read it (Multiplier, 19) in the Automatic Multiplier Keyboard.

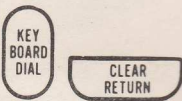
Instantly, as you entered the last figure (9) of the Multiplier, the Right Answer (2375) appeared in the Middle Dials! ③



NOTICE . . . Marchant's THREE-DIAL PROOF!

Multiplicand (125) appears in the Keyboard Dials.
 Multiplier (19) appears in the Upper Dials.
 Right Answer (2375) appears in the Middle Dials.

To CLEAR all dials and automatically reposition Carriage . . . with ONE STROKE touch:



(See page 7 for setting decimals and tabulator.)

Note: The CLEAR-RETURN Master Key may be adjusted to give the desired Carriage dial-clearance best suited to the figurework application.

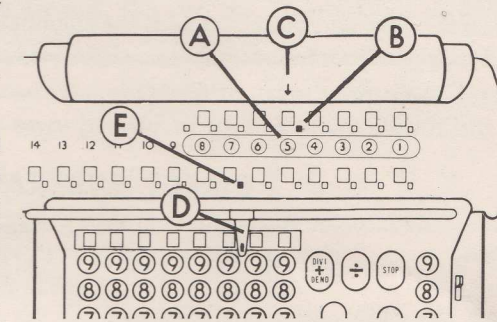
AUTOMATIC DIVISION

Marchant's Automatic Division performs all division problems automatically and electrically at the touch of a key, giving instant results with unequalled simplicity and ease.

Example: $128.34 \div 31.65 = 4.055$

Detailed Instructions

- Ⓐ To carry an answer out to *four* decimal places, set Tab Key 5. (Always carry the answer out to *one more* than the number of decimals you need to record, to allow for adjusting the last figure in the answer.)
- Ⓑ Set Upper Dial Decimal to the right of the Tab Key (between 5 and 4).
- Ⓒ Shift the Carriage into Position 5.
- Ⓓ Now position the Keyboard Dial Decimal Pointer so you can enter both amounts (Dividend and Divisor) "around" it.
- Ⓔ Flip over the Middle Dial decimal directly above the Keyboard Dials decimal.



To *divide*, enter the Dividend (128.34) in the Keyboard Dials "around" the decimal point. Touch the Add Bar (or Dividend Key) to transfer the Dividend into the Middle Dials.

Enter the Divisor (31.65) in the Keyboard Dials "around" the decimal point. Touch the Division Key. (Any figures in the Upper Dials automatically clear as the Division Key is touched.)

Answer (4.0549) automatically appears in Upper Dials.

DIVIDEND + KEY:

Upon completion of a division problem, the Keyboard Dials are automatically cleared, ready for entry of the next dividend.

A touch of the DIVIDEND + Key automatically clears the Carriage dials, repositions the Carriage, transfers the dividend from the Keyboard Dials into the Middle Dials, and clears the Keyboard Dials, ready for entry of the divisor.

DIVISION STOP:

The division process may be completely stopped at any time by touching the "STOP" Key twice.

AUTOMATIC ADDITION

To *add*, enter the amount to be added in the Keyboard, check it in the Keyboard Dials, lightly touch the Add Bar.



Example: Addition may be performed in any Carriage Position; 225 however, Position 1 is usually preferred. Therefore, with the Carriage at the extreme left, Active Dial Indicator (Orange Arrow) pointing to Upper Dial 1, enter 225 in the right of the Keyboard. Notice, this amount is instantly visible in a straight line in the Keyboard Dials, thus permitting a check, and a change if necessary, before the entry affects the total.

747
— 112
3175

A touch of the Add Bar adds this figure into the Middle Dials, and automatically clears it from the Keyboard Dials. Notice that no matter how long you hold down the Add Bar, Marchant adds the amount only *once*. The "1" which appears in the Upper Dials indicates that one item has been added.

Repeat the process until all five items have been added. The total, 3175, appears in the Middle Dials, and the number of items added, 5, in the Upper Dials.

DIRECT SUBTRACTION

Example: With Carriage in Position 1, enter 3175 in Keyboard Dials; touch Add Bar.
— 655 Enter 655 in Keyboard Dials; touch SUBTRACT Bar.



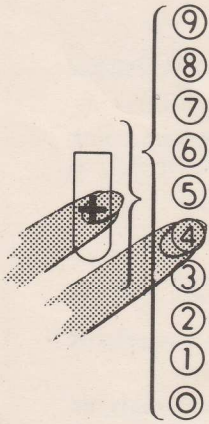
3175
— 655
2520

AUTOMATIC REPEAT ADDITION

Whenever the same amount is to be added more than once, just simultaneously touch the Add Bar and the Multiplier Key indexed for the number of repeats; Marchant automatically counts, repeats the addition, and clears the Keyboard Dials:

Example: Add 3503; add 6890.

3503 Enter 2356 in Keyboard Dials and simultaneously touch the Add Bar and "4" Multiplier Key. 2356 is automatically added four times, and cleared from the Keyboard Dials. Upper Dials show the correct item count—6.
6890
2356
2356
2356
2356
1653 Add 1653; add 1022.
1022
22492 The Total, 22492, appears in the Middle Dials, and the number of items added, 8, in the Upper Dials.



AUTOMATIC REPEAT SUBTRACTION

Whenever the same amount is to be subtracted more than once, simultaneously touch the Subtract Bar and the Multiplier Key indexed for the number of repeats.

WHITE PRE-SET DECIMALS

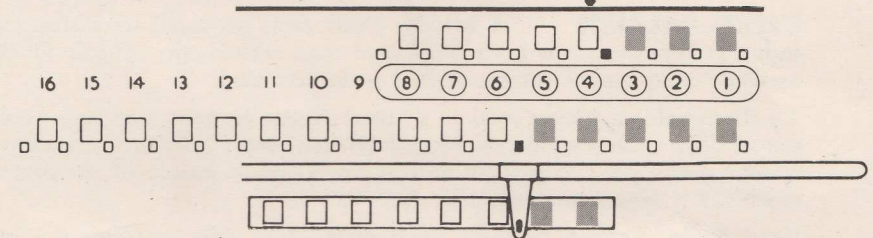
"Pre-set" means to set the decimal places needed for a group of problems *before* working any of them.

Working "around" a decimal point means to enter the whole numbers to the left of the pre-set decimal point, and the decimals to the right of that point.

THE FOLLOWING *RULE* FOR DECIMAL POINTS APPLIES TO ALL OPERATIONS:

Determine the number of decimals needed in the Keyboard Dials and the Upper Dials and set the decimals accordingly.

With the Active Dial Indicator (Orange Arrow) pointing to the first dial *left* of the Upper Dials decimal, flip over the Middle Dials decimal which is directly above the Keyboard Dials Decimal.



or—The number of decimals in the Keyboard Dials *plus* the number of decimals in the Upper Dials *equals* the number of decimals in the Middle Dials (KBD2 + UD3 = MD5)

TABULATOR AND CLEAR-RETURN

The push button tabulator keys directly under each Upper Dial afford easy and positive Carriage control for any Carriage position. Using Shift Key, the Carriage stops at set tab position when approaching from either direction, and does not unexpectedly tab out of that position should the Clear-Return Master Key be inadvertently touched. Several Tab Keys may be set at once by depressing them simultaneously.

A single touch of the CLEAR-RETURN Master Key clears Carriage dials and returns Carriage to pre-selected position.

For practice try this: Set Tab Keys 4 and 6. With Carriage in Position 1, touch Clear-Return Key and notice that Carriage positively stops in Position 4. (Touch Clear-Return Key again and note that Carriage does not move, because it is already in a tab-set position.) Now hold down (→) Shift Key and note that Carriage positively stops in Position 6, which is the next tabulator setup. Now hold down (←) Shift Key and note that Carriage shifts in opposite direction but positively stops at the next tabulator setup, which is 4.

Note: The CLEAR-RETURN Master Key may be adjusted to give the desired Carriage dial-clearance best suited to the figurework application.

TO CHANGE A MULTIPLIER ALREADY ENTERED

Marchant's great flexibility makes it extremely easy to change any digit entered in the Automatic Multiplier Keyboard—either during multiplication or even after the multiplication has been completed.

Here's how to do it: Just position the Active Dial Indicator over the figure in the Upper Dial you wish to change, then:

If you wish to *increase* the figure, just touch the Automatic Multiplier Key indexed for the increase desired. (For example, to increase a 5 in the Upper Dial to 8, just touch Multiplier Key "3".)

If you wish to *decrease* the figure, just touch the NEG \times Key and the Automatic Multiplier Key indexed for the decrease desired. (For example, to decrease a 7 in the Upper Dial to 3, just touch the NEG \times Key with Multiplier Key "4".)

That's all Marchant automatically changes the Upper Dials to the correct reading and at the same time automatically corrects the answer!



CREDIT BALANCE . . . A Middle Dials total preceded by a *string of nines* indicates that more has been *subtracted* than added—the Middle Dials figures are the "complement" of the answer to be recorded.

To change this negative total to a "true" figure amount, copy the figures from the Middle Dials into the Keyboard Dials directly below their location in the Middle Dials preceding them with a few (two or more) of the nines—touch the NEG \times Key with Multiplier Key "2".

Read Right Answer at right of Middle Dials (disregarding the preceding . . . 99800). Either precede the copied answer with a minus sign, or write "CR" to the right of it.



SPECIAL MARCHANT METHODS

Space does not permit reference to the many ways the Marchant may be applied to the figurework of business and industry. Special Marchant Methods, Tables, etc., are provided to show how to make calculations found in different businesses or industries. These may be obtained *free* on request from your Marchant Representative. Or, Marchant will gladly have a skilled Instructor help you in your office, free of all charges.



A MARCHANT TO FIT EVERY BUDGET

In addition to the Figurematic described in this brochure, Marchant offers its famous *Figuremaster* at a slightly higher price. It is the ultimate in high-speed performance. Or, your needs may call for our lower-cost *Semi-Automatic*, which has most of the features of the Figurematics but with bar-type, electric multiplication.

MARCHANT CALCULATORS, INC.

Oakland 8, California

