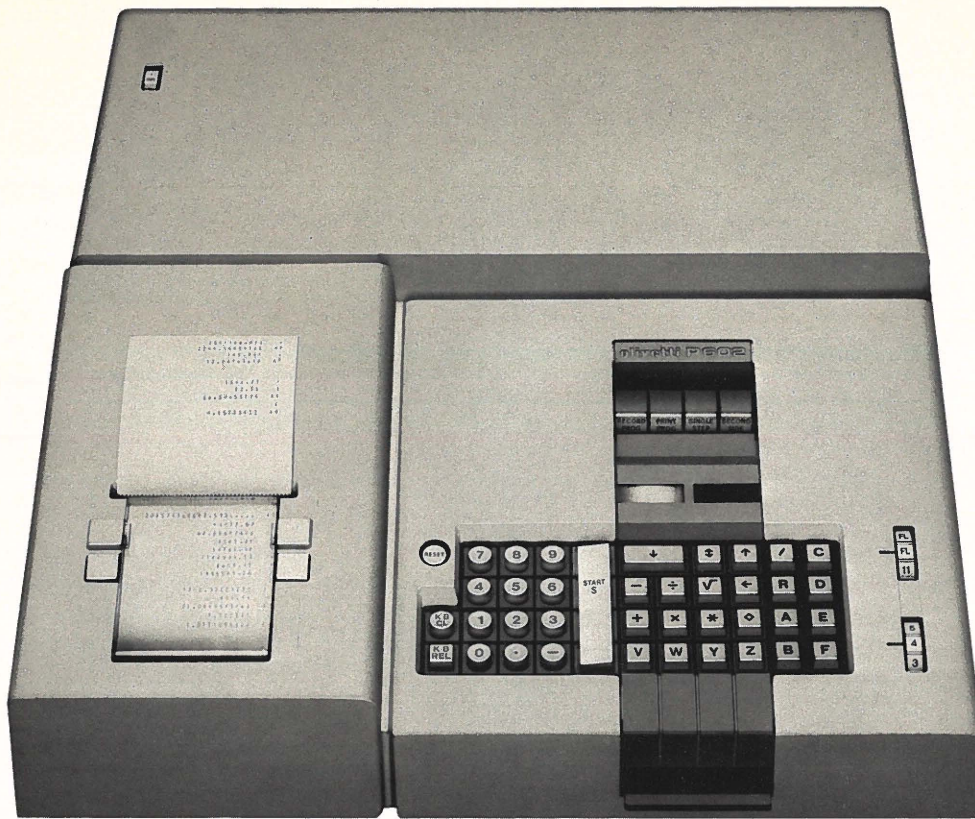


FEB 26 1975



Olivetti P602

ELECTRONIC PRINTING DESK-TOP MICROCOMPUTER

Program and variables recorded on magnetic card
Input-Output

Keyboard

Simplified numeric keyboard with 10 keys plus decimal point and algebraic negative sign.

Operational keyboard:

5 keys for addition, subtraction, multiplication, division and square root operations.

3 keys for data transfer from one register to another.

2 keys for printing and clearing the contents of the registers.

1 Start/Stop key.

1 Input/Output key.

4 routine selection keys enabling the operator to choose from 32 routines.

General reset key.

Keyboard clear key, for clearing the last data or instruction entered.

Keyboard release key, for releasing a locked keyboard.

7 address keys for identifying registers.

1 «split» key for splitting the registers.

Switches and controls:

Power supply on/off switch.

2 switches for reading/recording program on a magnetic card.

1 switch for program printing.

1 switch for single step operation in error location.

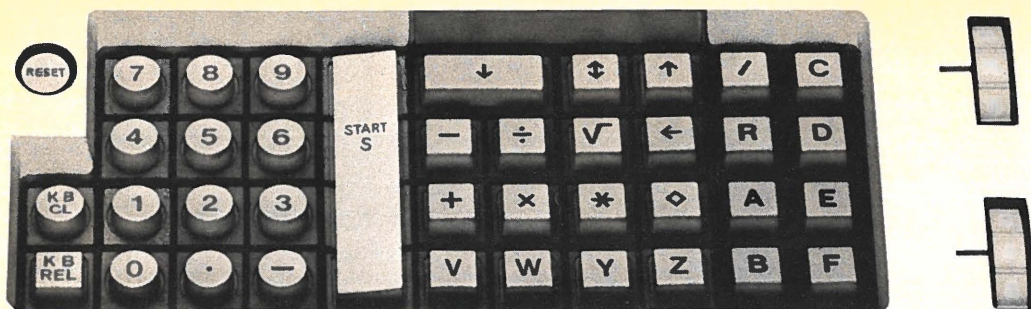
A program may be either printed or executed in single step mode.

2 decimal wheels: the lower one controls decimal places in printing; the upper one, which has a special «fixed length» position, controls the additional places in calculation.

Error light (red light) indicating operating errors.

Correct operation light (intermittent green light).

(PLEASE SEE REVERSE SIDE)



Arithmetic, storage and control units

Control and arithmetic unit of integrated circuit construction.

Main Memory consisting of:

3 operating registers, each of capacity 30 digits plus decimal point and negative algebraic sign.

9 data storage registers, each of capacity 30 digits plus decimal point and sign (or 32 instructions). These can be split into half or quarter registers with respective capacities of 15 and 7 digits plus decimal point and sign.

4 program registers, with capacity of 32 instructions each.

Data and program instructions may be shared among the registers or parts of registers.

Maximum program capacity of 384 instructions.

Read Only Memory (R.O.M.) containing pre-programmed routines for the evaluation of:

$\sin x$	e^x	Floating +
$\cos x$	10^x	Floating -
$\tan x$	$\ln x$	Floating ×
$\arctan x$	$\log x$	Floating ÷
$\pi/2$	$\ln 10$	

Recording and correction of programs

The instructions are entered into memory through the machine's keyboards.

Programs can be printed from memory either automatically, or step by step under operator control.

This allows accurate location of an error, which can then be corrected without complete re-entry of the program.

Long programs may be recorded on a number of cards and executed sequentially.

Magnetic card read/record unit

This allows the program and data stored in the main memory to be recorded on magnetic cards, and conversely, the contents of a card to be loaded into the Main Memory.

Printing unit

Serial printing using a revolving drum unit. This unit prints all keyboard entries and partial and final results as required. Program instructions may also be printed.

Capacity: 28 columns, 22 digits, sign, decimal point, operation and program symbols.

Speed: 30 characters per second.

Operations that can be programmed

Arithmetic operations: addition, subtraction, multiplication, division, square root.

Transfers: for exchange of data between registers.

Logic functions:

- 32 unconditional jumps
- 32 conditional jumps
- calls to Read Only Memory routines.
- calls to subroutines in Main Memory
- set/reset and/or test 3 sense switches
- stop instruction which halts program execution so that variable data may be entered.

Register addressing:

Storage registers may be directly addressed and may be « split » into half or quarter parts, each part directly addressable. Any storage register or part may also be used as a base register for indirect addressing. The contents of the base register then refer to one of 32 possible addresses. This address referred to is the one used in the operation.

Subroutines:

As many as four separate subroutines may be defined and « called » during the execution of a program. These subroutines may also be « nested »: one subroutine « calling » another.

Special instructions:

- operations with floating point, shift left or right
- generation of constants
- integer division with correct remainder

- percent multiplication, with round off
- jump to head of memory
- end of program loading
- clearing of data or instructions from registers, individually or by blocks
- absolute value of a number
- change of sign of a number
- separation of a number into its integer and decimal parts
- encoding of alphanumeric data
- control of peripheral units
- interline

Input-output

The basic machine P 602 is suited for connection to:

- magnetic cartridge random access store, MLU 600
- paper tape reader, LN 20
- paper tape punch, PN 20
- other units, such as x-y plotters, electronic balances, digital voltmeters, etc.

Electrical specification

Single phase motor: 110 V
Frequency: 60 cycle

Physical Characteristics

Width: 19"
Height: 7½"
Depth: 20½"
Weight: 73 lbs.

No air conditioning is required.

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