

SERIES 200

HONEYWELL 220-3 CONSOLE

The Type 220-3 Console is a control and communication center for the Honeywell Series 200 Data Processing System.¹ It normally abuts the central processor but may be located within any distance which does not exceed cable length restrictions. The console requires two address assignments.

The console consists of a console cabinet, a logic area, a console typewriter, and a control panel containing various indicators and push buttons. The control panel contains the main power switches, check condition indicator lights (VOLTAGE, FAN, CB, PARITY, SYSTEM ACTIVE, EXTERNAL, INTERNAL,² PROGRAM, and PROTECT²), and certain basic operator controls (STOP, RUN, INTERRUPT, etc.); it also contains SENSE switches³ which allow the operator to change program flow. As the principal component, the console typewriter transmits and records instructions and data between the operator and the computer and is used to perform the majority of system control operations.

OPERATIONS

The console typewriter can perform peripheral input/output operations, control operations, and logging operations. In the peripheral mode, the typewriter can be used by the central processor to type messages from a program, or it can be used by the operator to enter parameters into memory under program control. In the control mode, the operator can use the console as a control panel and utilize the typewriter for direct access to main and control memory. The typewriter produces a printed record of all memory entries and displays. In the logging mode, the typewriter can be used by the operator at any time as a standard typewriter without affecting the contents of memory or the operation of the system.

PERIPHERAL OPERATION

When the 220-3 is used in the peripheral mode, parameter entries are accomplished in four steps: (1) The operator is notified by the program that a parameter entry is required; the keyboard bell rings once and the TYPE indicator illuminates. If desired, the parameter request may be typed out. (2) The operator enters the parameter by typing it. (3) The program requests verification of the entry. And (4) the operator either confirms or cancels the entry by striking the appropriate key. (Any character key may be assigned as the confirm or cancel key by the program.) Steps 3 and 4 may be accomplished by means of programming techniques.

Typeouts (one record at a time) are accomplished by the execution of Write instructions from the program. The alphanumeric graphics used for typeouts and parameter entries are typed contiguously, ten to the inch.

Specifications remain subject to change in order to allow the introduction of design improvements.



VERTICAL SPACING

Carriage return, vertical movement of the paper, and single-line spacing are controlled by parameters in the programmed instructions or by the operator through the CARRIAGE RETURN key. Vertical spacing is three or six lines per inch, depending upon a manual adjustment of the typing mechanism.

CONTROL FUNCTIONS

When the console is used in the control mode, the space bar and certain typewriter keys (0-7, A, B, L, P, R, and S) are used to perform the following control functions: the space bar and octal keys (used directly after an A or P operation) cause characters to be written directly into main memory; A is used for address insertion; P is used to print the contents of a control memory register; B is used to bootstrap; L is used for the logging mode; R is used for a register dump; and S is used to initiate the next instruction (step one instruction). Also, the control panel of the Type 220-3 is operative while the console is in the control mode.

LOGGING

The console typewriter becomes a logging device when the TYPE indicator is extinguished, the carriage is returned, and the L key is pressed. In this condition, the typewriter operates off-line and presents a busy signal to the central processor. Any of the keys (listed below) may be used to type messages without affecting the operation of the system; therefore, the operator may log while a program is running. Logging operations are

(Continued on reverse side)

terminated by pressing the CARRIAGE RETURN key; however, they are not affected by the automatic carriage return that occurs at the end of each print line.

CHARACTER SET

The character set for the console typewriter consists of the numerals 0 through 9, the letters A through Z, and the following symbols:

= (Equals)	,	(Comma)
+ (Plus sign)	.	(Period or decimal point)
- (Minus sign)	\$	(Dollar sign)
/ (Slash)	#	(Number sign)
' (Apostrophe)	"	(Quotation mark)
: (Colon)	@	(Commercial "at" sign)
; (Semicolon)	C _r	(Credit symbol — one character)
& (Ampersand)	■	(Filled square)
< (Less than)	□	(Square)
> (Greater than)	?	(Question mark)
% (Percent sign)	≠	(Unequal)
((Left parenthesis)	!	(Exclamation mark)
) (Right parenthesis)	¢	(Cent symbol)
Δ (Space)		
* (Asterisk)		

¹When the Type 220-3 is attached to the Model 120, a Series 200 Control Unit Adapter (Feature 1015 or 1016) is required.

²Present only when the 220-3 is used with the Type 1201 or Type 2201 Central Processors.

³Four; and four additional SENSE switches are present when the 220-3 is used with the Type 2201 Central Processor.

SPECIFICATIONS

CONTROL PANEL: Includes power switches, check indicators, SENSE switches, and basic operator controls.

CONSOLE TYPEWRITER OPERATIONS: Peripheral, control, and logging.

ADDRESS ASSIGNMENTS: Two.

TYPING RATE: 10 characters per second.

CHARACTERS PER LINE: 64.

NUMBER OF PRINTABLE CHARACTERS: 64.

SPACING OF PRINTED LINES: 3 or 6 lines per inch.

CARRIAGE RETURN (FROM RIGHT TO LEFT) AND SINGLE SPACE: 0.2 second (maximum).

PAPER DIMENSIONS: Width — 8.5 inches maximum.
Roll diameter — 5 inches maximum.

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