

**PAPER TAPE INPUT
AT 2000 CPS TO
IBM SYSTEM/360 AND 370**

r 2000[®]
PAPER TAPE READER



**- Available now with Control Unit
for IBM System/360 and 370 -
Offers you the Following:**

Speed

The RC 2000 reads continuously at a speed of 2,000 characters a second. Because of a built-in solid state buffer store of 256 characters, the RC 2000 can read bursts of up to 128 characters at 20,000 characters a second.

Versatility

The RC 2000 handles 5, 7, and 8 track tapes as well as 6 track Olivetti tape. The RC 2000 also accepts input from a punched card reader or an optical character reader.

Reliability

In a recent 350 hour test by a leading American computer manufacturer, the RC 2000 read more than 1,000,000,000 characters, at various speeds and from eight different types of tape, without an error.

The RC 2000 employs a minimum of moving mechanical parts, which considerably reduces wear and tear during operation.

Fast, easy Operation

Everything needed to operate the RC 2000 is found on the front panel. The RC 2000 has only four push-button controls, and tape format is changed simply by turning two knobs.

On-Line Input to IBM System/360 Series

The RC 2000 Paper Tape Reader can be used on-line with IBM System/360 computers, ranging from model 25 to model 195, by means of the RC 2360 Control Unit, which is connected to a multiplexor or selector channel.

The RC 2000 Paper Tape Reader can also be used on-line with model 20 sub-models 2, 4, and 5, provided an IBM 4658 I/O Channel exists for connection of the RC 2360 Control Unit.

The RC 2360 Control Unit conforms to the specifications contained in the OEM manual "IBM System/360 I/O Interface" (Form A22-6843).

The test program for the IBM 2671 Paper Tape Reader is used to test the combined RC 2000 - RC 2360.



IBM 360 IBM 370

Programming

valid commands:

	P	0	1	2	3	4	5	6	7
READ	0	0	0	0	0	0	0	0	1
SENSE	0	0	0	0	0	0	1	0	0
CONTROL (NOP)	1	0	0	0	0	0	0	1	1
TEST	1	0	0	0	0	0	0	0	0

invalid

commands:

READ BACKWARDS
WRITE
MODIFIED READ

Status Information

The RC 2360 Control Unit has an end-of-file button. This button is pressed when the last tape of a file is read (light turns on). When the IBM System/360 is informed that the last tape has been read - or when the stop key is operated - the light turns off.

The following status information is provided by the combined RC 2000 - RC 2360:

Bit 3 - **Busy** indicates that a command is being executed, or that the RC 2360 has "stack status".

Bit 4 - **Channel End** indicates that a command has been executed.

Bit 5 - **Device End** indicates that the unit can accept a new command.

Bit 6 - **Unit Check** indicates that information is present in the sense register.

Bit 7 - **Unit Exception** indicates that tape has run out and that the end-of-file button has been pressed.

Unused bits are always logical zero.

Sense Information

Sense information indicates special conditions either in the present status of the unit or having arisen during the previous operation. The presence of information in the sense register is indicated in a status byte by a Unit Check. Sense information is deleted when the next read command is accepted.

The following sense information is provided:

Bit 0 - **Command Reject** indicates that an invalid command has been sent or that a parity error has been found in an otherwise valid command.

Bit 1 - **Intervention Required** indicates that the RC 2000 buffer store is empty and no tape has been loaded.

Unused bits are always logical zero.

Off-Line Uses of the RC 2000 Paper Tape Reader

As a general-purpose input device, the RC 2000 can be extended with a control unit and a magnetic tape station for off-line conversion of input and output data to and from magnetic tape.

By operating a variety of peripheral devices independently of the computer, this system - called the RC 3600 Terminal System - frees the computer from the necessity of handling large volumes of data on low-speed peripherals (provided it is equipped with on-line tape stations).

Models are available for both 7 and 9 track, IBM compatible tapes. The following devices can be connected to the CPU.

- paper tape reader (2000 characters a second)
- punched card reader (1500 cards a minute)
- optical character reader
- line printer (1000 lines a minute)
- paper tape punch (150 characters a second)
- incremental plotter (e.g. 300 0.1 mm steps a second)

Direct conversion, for instance, from paper tape or punched cards to a line printer or a paper tape punch, is also possible.



RC 2000 Options and Accessories

The RC 2600 Paper Tape Winder, which winds paper tapes as fast as they are read by the RC 2000, is available optionally, as is the RC 2010 Reader Stand (both shown in photograph).

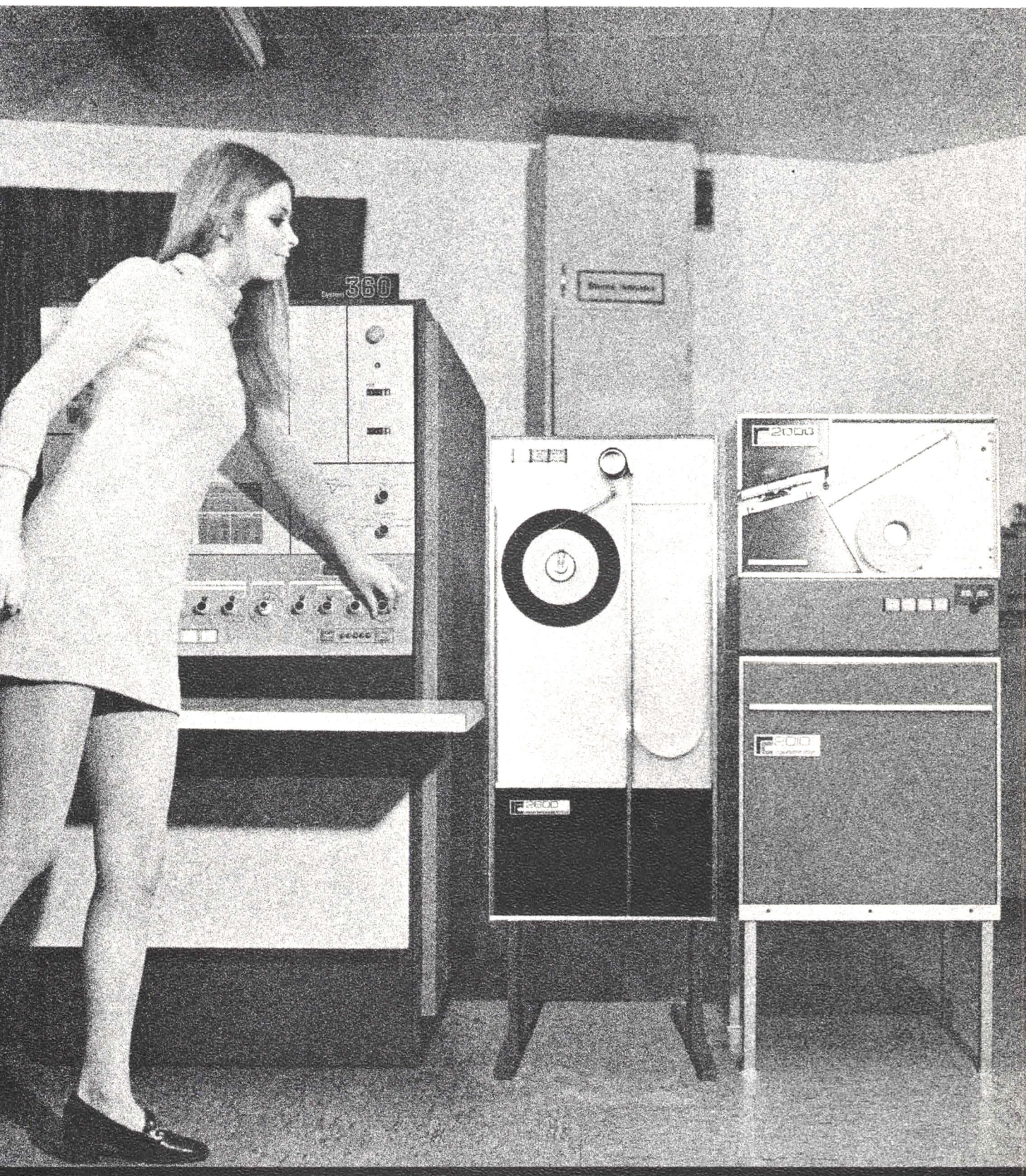
Paper tape accessories include a hand punch, splicer, tape gauge, mechanical punch, and electric winder.

Further Information

Some 1600 RC 2000 Paper Tape Readers, developed and manufactured by A/S Regnecentralen in Denmark, are now being used with the following computer systems: Bull Gamma 30 and Bull GE 115/400 series. CDC 3000 series, Honeywell 200/400 series, IBM 1130/1401 series, ICL 1004/1500/1900 series, NCR 315 and Century series, RCA 301, Regnecentralen RC 4000, Saab D21/D22, Siemens 3003/4004, Telefunken TR4/TR440, Burroughs 3500, Univac 1004/1108/9000 series, and – as you probably have noticed by now – IBM System/360 and 370 series.

For additional information, including technical specifications, contact your computer supplier or us.







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