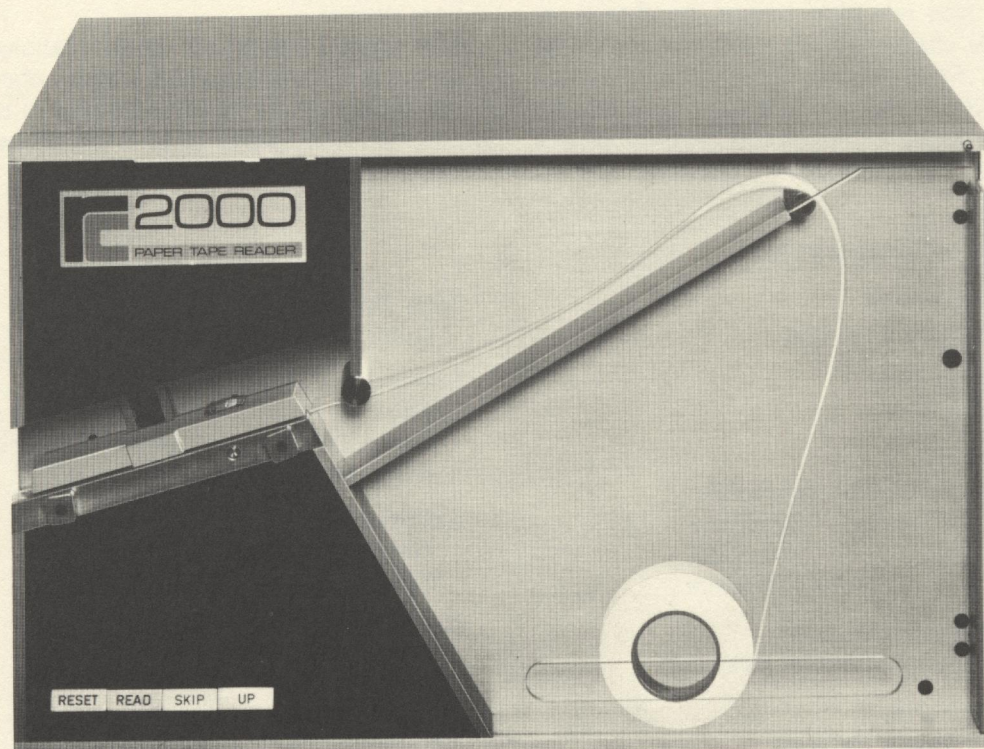


RC 2000 PAPER TAPE READER AND RC 4161 PAPER TAPE READER CONTROLLER



The paper tape reader has a reading speed of 2000 characters/second. It reads perforated tape of any opaque medium, accepting both normal round-hole formats with 5, 7, and 8 tracks and the square-hole 6-track format. The tape is supplied from a free-running roll up to 300 m long, equivalent to approximately 120,000 characters. Data is transferred to the RC 4000 via the low-speed data channel. Parity checking can be performed in the paper tape reader controller.

The reader, which reads photo-electrically, is a servo operated device with a built-in solid-state buffer store of 256 characters. Controlled by a servo driven capstan, the tape flows from the supply roll chamber along the tape corridor past the read head. The servo system operates the capstan so as to seek an input character rate that equilibrates the output rate with a reader buffer content of approximately 128 characters, limited to a maximum speed of 2000 characters/second.

The reader is designed for table operation and can be placed on the console for operating convenience. The controller is placed in the central processor or an input/output controller cabinet. The reader and controller are connected by means of two cables, maximum 12 m in length.

The reader can be equipped with an automatic tape winder (RC 2100).

Operation

The reader is operated by standard input/output instructions for performing input operation. The controller and the reader execute an operation without engaging the computer and generate interrupt signals when the end of the tape has been sensed, or when more than 64 characters are stored in the reader buffer. When loaded, the reader is started immediately, and characters are read into the reader buffer. An instruction (read command) defines odd/even parity checking (or no

checking) and transfers one character from the reader buffer to the device buffer. Another instruction (sense command) transfers data from the device buffer to the RC 4000.

When the reader buffer is empty and no tape remains at the read head, a read command transfers an end-of-tape character to the device buffer. When the reader buffer is empty and tape is still present at the read head, a read command transfers an end-of-buffer character to the device buffer.

An operator's panel on the reader allows the operator to load tape, initiate reading, and skip tape through the reader without its being read.

Data Format

The reader accepts data representations with up to 8 bits in each character. Parity checking can be performed in the controller or by the program. The reader skips blind characters (no holes).

CHARACTERISTICS

Reading Speed

Max. 2000 char/sec

Character Size

Max. 8 bits

Tape Width

Switchable tape guides for
 7 and 8 tracks: 25.5 mm
 5 tracks: 17.5 mm
 6 tracks (Olivetti): 20.6 mm

Intercharacter Space

Min. 2.54 mm center to center

Tape Material

Any opaque medium

Tape Thickness

Max. 0.3 mm

Tape Length

Max. 300 m, equivalent to approx. 120,000 characters

Tape Roll

Outer diameter: max. 200 mm

Power

220 V \pm 10 %, 50 Hz \pm 4 %, max. 1 A
 The controller is supplied from the power supply in a controller cabinet.

Ambient Air

Temperature: 16 to 30°C
 Relative humidity: 40 to 70 %

Cooling Air

120 m³/hour from ambient
 119 kcal/hour

Size and Weight

Width: 52.0 cm
 Depth: 46.3 cm
 Height: 32.6 cm
 Weight: 36.0 kg

The controller is placed in the central processor or a controller cabinet.

