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The WANG Model 2203 Punched Tape Reader provides a versatile data and program input capability for the System 2200B. The Model 2203 reads punched paper tape in a forward or reverse direction at an average rate of 300 characters per second. Inadvertant drag on the tape does not cause a loss of data. Data is read sequentially by the Model 2203: after each character is read, the tape is stepped forward to the next character.

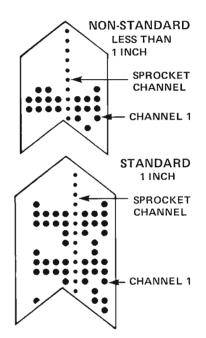
The Model 2203 is designed to read standard one-inch. eight-channel tape punched in ASCII code, as well as narrower non-standard tapes (which conform to Model 2203 specifications) and codes other than ASCII. Once stored in System 2200B memory, non-standard codes can be converted to ASCII or internal numbers with the System 2200B bit and byte manipulation language features.

Three System 2200B BASIC statements and commands are used to access the Model 2203: LOAD (statement and command), DATALOAD (statement), and DATALOAD BT (statement).

LOAD is used to load BASIC programs in ASCII from a paper tape which contains standard System 2200 format information into System 2200B memory.

DATALOAD is used to load data in free format ASCII (with specific control characters) from a paper tape which contains standard System 2200 format information and store it in System 2200B memory.

DATALOAD BT is used to load data from a paper tape which is punched in any code or formatted according to any convention and store it in a single alpha-numeric variable or array in System 2200B memory. The DATALOAD BTR statement can be used to read in reverse.







FEATURES	BENEFITS			
The Model 2203 can read punched paper tape in any code or format. The reader can be programmed to read a specified number of characters, or to stop reading when a specified character is read.	Because the Model 2203 can read punched paper tape in any format, it can be used in conjunction with virtually any system which generates data on paper tape.			
2. Three BASIC statements, LOAD, DATALOAD, and DATALOAD BT are used to access the Model 2203.	<ol><li>The BASIC statements and commands used to access the Model 2203 are simple and straightforward. No special programming ability is required to access and utilize the tape reader.</li></ol>			
<ol> <li>Under LOAD and DATALOAD control, the Model 2203 ignores blank leader code automatically; under DATALOAD BT control, the Model 2203 can be programmed to ignore any designated leader code.</li> </ol>	<ol> <li>Since the Model 2203 either ignores leader code automatically or can be programmed to do so, the need to position the beginning of a tape precisely under the reader head is obviated.</li> </ol>			
4. The Model 2203 reads paper tape optically at an average rate of 300 characters per second. Drag on the tape does not result in data loss.	4. Because it is an optical reader, the Model 2203 reads rapidly, reliably, and silently, emitting only a faint hum as it reads. The noise of mechanical readers is a thing of the past.			
5. Under DATALOAD BT control, the Model 2203 easily can be instructed to read a paper tape in reverse.	5. The Model 2203 reverse feature allows you to "back up" a paper tape and reread the same data repeatedly under program control. This feature is valuable if punched data has some form of validity check for retry procedures or if specific sections of tape must be repositioned.			

## **SPECIFICATIONS**

#### Tape Size

Standard 8-channel one-inch paper tape, as well as narrow (five, six and seven track) tapes which conform to these specifications:

- a. The sprocket holes must conform to the Model 2203 pin feed mechanism, which handles 10 sprocket holes per inch.
- b. The sprocket hole center line must align with the data hole center line.
- c. The ratio between diameter of sprocket hole and diameter of data hole must conform to punched tape standards.

### Tape Code

Standard 7-level ASCII is used by the System 2200; any other code can be read in and converted to internal numbers or ASCII characters under 2200B software control.

## Reading Speed

300 characters per second average.

## Type of Reader

Optical

#### Dimensions

/ 4 0 5					13
Depth					11.5 in. (29.2 cm
Width					7.5 in. (19.1 cm)
Height					6.5 in. (16.5 cm)

(13.5 in. counting reader head)

#### SPECIFICATIONS (Cont.)

#### Weight

13 lbs (5.9 kg)

## Power Requirements

115 VAC ± 10% 60 Hz ± ½ cycle 230 VAC ± 10% 50 Hz ± ½ cycle

## Cable

8-ft (2.43 m)

# Operating Environment

 $50^{\circ} \text{ F } (10^{\circ} \text{ C}) - 90^{\circ} \text{ F } (32^{\circ} \text{ C})$ 

40% to 60% relative humidity.

Standard Warranty Applies.

# ORDERING SPECIFICATIONS

An optical high-speed paper tape reader capable of loading data and program text from a punched paper tape into the WANG System 2200B calculator. The unit must read data from punched paper tape at a rate of 300 characters per second, in a forward or reverse direction. The unit must be able to accommodate non-standard tape sizes and non-standard codes, as well as standard 8-channel tape punched in ASCII code.

Wang Laboratories reserves the right to change specifications without prior notice.



LABORATORIES, INC.