WANG LABORATORIES, INC.

DATA SHEET - MODEL 9020

The Model 9020-24, 24 Hour Time of Day Clock provides a convenient method of reading the time of day from the CRT of a 2200 System. Once set (usually after system power-on), the clock provides the time of day in hours, minutes, and seconds, on request. The logic of the Model 9020-24 resides on a controller board which plugs into any available I/O slot in a 2200 series CPU and WCS systems (except PCS, PCS-II, WS and WCS-15).

The Model 9020-24 accepts and outputs time in a 24-hour format. The time is set by a PRINT verb followed by an alphanumeric variable consisting of four digits. The four digits indicate the hours and minutes; seconds are automatically set to 00 whenever the time is set. THE SET TIME ADDRESS IS HARDWIRED to 237.

The time on the Model 9020-24 may be set by the following routine;

10 INPUT "What time is it", A\$
11 SELECT PRINT 237
12 PRINT A\$
13 SELECT PRINT 005

This statement prompts WHAT TIME IS IT? to which the operator enters four digits in hours - minutes format HHMM. Note that it is important to reselect the CRT address 005 after the time is set, otherwise all PRINT statements in subsequent programs will RESET THE CLOCK TIME.

To read the time, an INPUT statement is used with either a numeric or alphanumeric variable to receive the time. THE READ TIME ADDRESS IS HARDWIRED TO 236. The time is "output" to the receiving variable in hours, minutes, and seconds in HHMMSS format. The time on the Model 9020-24 may be read by the following routine:

21	INPUT A
22	SELECT INPUT 001

The SELECT INPUT 236 specifies the device address of the clock to enter in the time for the INPUT statement. Note again that it is important to reselect the keyboard address 001 after the time is read, otherwise all INPUT data requested in subsequent statements will be WANG) LABORATORIES, INC.

Alternately, MAT INPUT, KEYIN, or $GIO \mod B$ used to request a TIME INPUT.

NOTE:--- For MVP systems, the use of \$GIO is suggested for "Reading the Time". Ex:

> 30 DIM T\$7 31 \$GIO/036 (010D C650, A\$)T\$ 32 PRINT T\$

By using cursor positioning HEX codes in the "read time" routine, the operator can output the time anywhere on the CRT, or output the time to a printer on hard copy reports, as required. Also, colons may be inserted between the hours and minutes and between the minutes and seconds, for easier reading.

doc. 6681A/bkm