

**Operations Manual** 

## **NOTICE**

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#### CORCOMP CLOCK CALENDAR STAND ALONE UNIT

#### **INTRODUCTION**

The CorComp Clock Calendar Stand Alone Unit (Clock Calendar SAU) allows the user to set and read the:

- Day of the Week
- Month
- Day
- Year
- Hour
- Minute
- Second

Time is based on the 24 clock and leap year is handled automatically without user intervention.

The Clock Calendar SAU can be accessed through either TI BASIC or TI Extended BASIC. It utilizes the following four commands: OPEN, PRINT, INPUT AND CLOSE.

The Clock Calendar SAU also includes a Load Interrupt Switch that when manually pressed will generate a load interrupt command to the computer. This in turn will allow the use of many utility programs, such as a screen dump program, which require this feature.

#### INSTALLING THE CLOCK CALENDAR SAU

- 1. Turn off the computer and everything connected to the computer.
- 2. To avoid damage to any of the parts, wait at least two minutes after turning the power off before plugging or unplugging anything to or from your computer systems.
- Plug the Clock Calendar SAU into the side of the computer. NOTE:
   If you have a speech synthesizer and/or a CorComp 9900 Micro
   Expansion system, it is recommended that these units be plugged into the computer first and then plug the Clock Calendar SAU so that it is the last unit in the chain.
- 4. Turn on the power to all of the units in your system with the computer being the last unit to have the power turned on.

#### \*\*\*\*\*\* WARNING \*\*\*\*\*\*

TO AVOID DAMAGE TO ANY OF THE PARTS, WAIT AT LEAST TOW MINUTES AFTER TURNING POWER OFF BEFORE PLUGGING THE CLOCK CALENDAR SAU INTO THE SYSTEM, OR PLUGGING ANYTHING INTO YOUR COMPUTER SYSTEM. WAIT AT LEAST TWO MINUTES AFTER TURNING THE POWER OFF BEFORE UNPLUGGING THE CLOCK CALENDAR SAU FROM YOUR COMPUTER, OR UNPLUGGING ANYTHING FROM YOUR COMPUTER SYSTEM.

## **VERIFYING THE CLOCK CALENDAR SAU OPERATION**

Once the unit is properly installed and power is turned on, enter TI BASIC or TI Extended BASIC. Since the time generation circuitry is powered by a battery at all times, the present time contained in the unit can be determined by entering the following program commands:

10 OPEN #1:'CLOCK" 20 INPUT #1:A\$,B\$,C\$ 30 PRINT A\$,B\$,C\$

This program will read the three variables; day of the week, date, and time from the Clock Calendar SAU and display them on the screen.

#### **DESCRIPTION OF THE BASIC COMMANDS**

Following is a description of the four basic command:

#### 1. OPEN STATEMENT

OPEN #file-number:"CLOCK"

The file number can be any between 1 and 255 or a numeric expression. This statement must always proceed a PRINT or INPUT statement.

## 2. PRINT STATEMENT

PRINT #file-number:"d,mm/DD/yy,hh:MM:SS"

d = Day of the week (1 through 7).

mm = Month

DD = Day

yy = Year

hh = Hour (Based on a 24 clock).

MM = Minute

SS = Second (Always set to 00 when setting the time).

# NOTE: THE PRINT STATEMENT MUST ALWAYS INCLUDE ALL SEVEN OF THE PARAMETERS. THE CLOCK BEGINS COUNTING AT THE MOMENT THIS COMMAND IS ENTERED.

## 3. INPUT STATEMENT

INPUT #file-number:S1,S2,S3

Where: File-number As specified in the OPEN statement.

- S1 String variable which reads the Day of Week.
- S2 String variable which reads the date as mm/DD/yy.
- S3 String variable which reads the time as hh/MM/ss.

NOTE: AN INPUT STATEMENT MUST ALWAYS CONTAIN ALL THREE

(S1,S2, AND S3) STRING VARIABLES.

#### 4. CLOSE STATEMENT

CLOSE #file-number

## SAMPLE PROGRAM NUMBER 1:

10 OPEN #1:"CLOCK"

20 PRINT #1:"4.06/25/85.14:22:00"

30 INPUT #1:A\$,B\$,C\$

40 PRINT #1:A\$,B\$,C\$

50 CLOSE #1

## SAMPLE PROGRAM NUMBER 2:

10 CALL CLEAR

20 INPUT "DAY OF WEEK (1-7) ":A\$

30 INPUT "DATE (MM/DD/YY) ":B\$

40 INPUT "TIME (HH:MM:SS) ":C\$

50 D\$=A\$&","&B\$&","&C\$

60 OPEN #1:"CLOCK"

70 PRINT #1:D\$

80 CLOSE #1

#### **BATTERY REPLACMENT**

The Clock Calendar SAU contains a small battery that provides power to the clock circuitry so that time is maintained even when the main power is turned off. This battery will provide power for about six months of operation with power off.

Therefore, periodically you will have to replace the battery using the following procedure: After turning off the main power to the computer system, disconnect the Clock Calendar SAU. Remove the two screws on the bottom of the unit and remove the top cover by lifting from the front edge of the cover. Use caution so as not to damage the Load Interrupt Switch located at the rear of the unit.

Remove the batter (the round silver component located in the middle of the printed circuit board) by placing a small screwdriver under the lip of the battery and very gently pry it out of its' holder.

Then insert the new battery by slipping it under the spring clamp and push it into the holder. The PLUS side of the battery (the side with the small lip) must face out from the holder.

After connecting the computer system and turning on the power the time must be programmed into the Clock Calendar SAU.

The following 3 volt battery can be used:

- CR2032 lithium battery