# Micro Control Systems APPLICATION NOTE

APP-019

## **MCS-8 Keypad Functions**

### **Revision History**

Date	Author	Description
2/18/99	Kelly Mitchell	Created Application Note

This Application Note is supplied to be a quick reference sheet for the operation of the keypad functions on the MCS-8 microprocessor unit for a chiller application.

#### **Authorization - How To Get Authorized**

Once you have pressed the PROGRAM key you may either continue to press the SERVICE DIAGNOSTICS key or press the + or – key to find the service diagnostic option desired. The example below describes becoming authorized.

Action	Display After Action
Press SERVICE DIAGNOSTIC KEY Twice	AUTHORIZATION ENTER CHG/OPTION
Press ENTER	ENTER AUTH #XXXX THEN 'ENTER' KEY
Now enter the proper four digit authorization number and then press the ENTER key.	
If a correct authorization code is entered the following display occurs: (Line 1 will display the level of authorization you have entered)	AUTH = FACTORY SEL NEXT OPTION
If an incorrect authroization code is entered the following display occurs:	AUTH # INVALID

#### **Setpoints - How To Change Setpoints**

**Keypad-**The user must have pressed the 'SETPOINTS' key until the set point to be changed is on the display and pressed the 'ENTER' key to change. This presents a + or – indication to allow a change.

**PC-Connection-** The user must have selected the 'SETPOINT' button from the 'STATUS' display. Then the user must select the value for the proper set point to change. The user is then presented with a spin change dialog box.

#### (AUTHORIZATION IS REQUIRED)

Action	Display After Action
Press SETPOINT KEY to find the setpoint	#3 SUPPLY1 TARG ENTR CHG +3.5C
Press ENTER	#3 SUPPLY1 TARG ENTR +/- +3.5C

Press INCREASE	
Pressing the + or – key now increases or decreases the setpoint value. When you have reached the value desired press ENTER KEY to make the change.	#3 SUPPLY1 TARG ENTR +/- +4.0C
The following message is displayed, where 4.0 is the new value:	#3 SUPPLY1 TARG ENTR +/- +4.0C

#### Manual / Auto - How To Place a RO / AO or SI in Manual

Provides a display of three sub menus as follows:

RELAY OUTs MANAL Access to devices turned on or off by computer ANALG OUTs MANAL Access to Analog output controlled by computer SENSOR INs MANAL Access to Sensor inputs to computer

Once you have pressed the MANUAL/AUTO key you may either continue to press the MANUAL/AUTO key or press the + or - key to find the output desired. The example below describes changing the a RELAY OUT in the system.

#### (AUTHORIZATION IS REQUIRED)

Action	Display After Action
Press MANUAL KEY	RELAY OUTS MANAL ENTER CHG/OPTION
Press ENTER KEY	FAN1ARUN OFF ENTER CHG/OPTION
Press INCREASE or DECREASE KEY	
Pressing the + or – key now scrolls you thru the RELAY OUTPUTS.	FAN1A AUTO ENTER CHG/OPTION
Press ENTER KEY	FAN1A AUTO ENTER OR +/-
Press INCREASE or DECREASE KEY	FAN1A MANON ENTER OR +/-
Pressing the +/- key now allows the selection of MANON, MANOFF, or AUTO. When you have reached the desired state press the ENTER KEY to make the change. The following message is displayed if the state selected was MANON.	FAN1A MANON CHG MADE/NXT-SEL

#### Sensor Offset - How to change the Offset of a Sensor

The

#### ( AUTHORIZATION IS REQUIRED)

Action	Display After Action

#### PROGRAM – How to change the Date and Time

The PROGRAM key provides a group of submenu's for DATE & TIME as well as several other items. Listed below are the submenus are as follows:

DATE DISPLAY Display of computers current date & day of week

TIME DISPLAY
DATE & TIME SET
DAY OF WEEK SET
DAY OF WEEK SET
Display of computer's current time & day of week
Access to computer's mm,dd,yy & hh:mm for setting
Access to computer's current day of week for setting

Once you have pressed the PROGRAM key you may either continue to press the PROGRAM key or press the + or - key to find the sub menu desired. The example below describes changing the DATE & TIME SET in the system.

#### (NO AUTHORIZATION IS REQUIRED)

Action	Display After Action