

Installation Instruction


User Interface

ZONEBB0USI01-B
ZONECC0USI01-B

NOTE: Read the entire instruction manual before starting the installation.

SAFETY CONSIDERATIONS

Read and follow manufacturer instructions carefully. Follow all local electrical codes during installation. All wiring must conform to local and national electrical codes. Improper wiring or installation may damage User Interface.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the equipment and in the instruction manual, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **would** result in minor personal injury or product and property damage.

INTRODUCTION

The User Interface contains factory default settings. Each User Interface **MUST** be configured for proper operation.

For maximum performance read the following information in conjunction with revised zoning kit "Installation and Start-Up Instructions" dated 8-99.

The User Interface is the command center for the entire zoning system. Each zoning system will require 1 User Interface that is responsible for communicating with the Equipment Controller (main board) and each of the zone temperature sensors (i.e., Remote and/or Smart Sensor). The User Interface also contains **ALL** the software configuration and setup information, as well as Comfort Schedule. Review the following before you begin to install the User Interface control:

- Quick Start
- Quick Programming
- Comfort Charts
- Configuration Record

INSTALLATION

PROCEDURE 1—QUICK START

For first time installers Quick Start will allow you to start up the zoning system before you have had a chance to learn all the details of system operation. However, for the best possible comfort and energy saving results, we recommend that you read through the Owner's Guide and set up the system to match the end-user's schedule and comfort requirements.

To begin, install the User Interface and perform the following steps.

A. Set the current day and time:

1. Press the **Next Day** button until the current day of the week is shown.
2. Press the **Set Time/Temp** button until the TIME icon flashes.
3. Press the **Up** or **Down** buttons until the desired time is shown, making sure that the AM or PM time is correct.
4. Press the **Hold/End** key to exit.

B. Select the system mode:

1. Press the **Mode** button to select HEAT or COOL.
2. Press the **Hold/End** button to turn on the HOLD icon.
3. Press the **Up** or **Down** button, and either the HEAT or COOL icon will flash. This indicates the mode that you have selected and it is now ready for adjustment.

4. Press the **All Zone** button, this will change all the other zones to these new set points. You will then see "--" in the set point location for all other zones. Pressing the **Next Zone** button allows you to scroll through each zone.

PROCEDURE 2—QUICK PROGRAMMING

The following is an overview of how to access and program schedules in your new zoning system. It is highly recommended that you read and follow the programming information provided in the Owner's Guide for detailed step-by-step instructions.

Before proceeding, set the correct Time and Day at the User Interface (see Quick Start). If, however, you have already followed the Quick Start procedure in selecting the system mode, you will need to reverse the All Zone and/or Hold functions before proceeding. Simply press the **All Zone** and/or **Hold** button to remove these icons from the display (make sure Hold is removed from each zone).

During the programming process you will have access to 4 program time periods; WAKE, DAY, EVE, and SLEEP. You will be able to select program start times and the heat/cool set points for each time period and zone. Use the Keypad to enter and move around inside the program. Use the temperature Up and Down buttons to adjust the start times and to raise and lower set points. When inside the program, the blinking icon indicates that a setting may now be changed.

IMPORTANT: Table 1 is an example of what already exists in the User Interface as the Energy Star recommended settings. You may change or adjust the schedule to suit your needs.

Table 1—Factory Default/Energy Star Schedule

SCHEDULE	HEAT	COOL
Wake 6:00 AM	68°F	78°F
Day 8:00 AM	60°F	85°F
Evening 5:00 PM	68°F	78°F
Sleep 10:00 PM	60°F	82°F

A. To begin programming:

1. Press the **Program** button.
2. Press the **Next Zone** button until ZONE 1 is displayed on the LCD.
3. Press the **Next Day** button until Monday (Mo) is displayed.
4. Press the **Next Period** (Program) button until WAKE is displayed.
5. If the **TIME** icon is not already flashing, press the **Set Time/Temp** button until it flashes.
6. Start programming Zone 1, beginning with the WAKE start time. Press the Up or Down button until the desired starting time is displayed, ensuring that the AM/PM time is correct.
7. Press the **Set Time/Temp** button until the HEAT icon is flashing. Press the Up or Down button until the desired heating temperature for that period is displayed.
8. If that zone is going to be unoccupied press the **Out** button. For more information regarding the Out feature, read sections pertaining to Hold, Off, Out and All Zone in the Installation and Start-Up Instructions.
9. Press the **Set Time/Temp** button until the COOL icon is flashing. Press the Up or Down button until the desired cooling temperature for that period is displayed. You have now programmed the time and desired heating and cooling temperatures for Monday, ZONE 1, in the WAKE time period.
10. Press the **Next Period** (Program) button to change from the WAKE to the DAY period. Repeat the above steps to program the time, desired heating and the cooling temperatures for Monday, ZONE 1, in the Day period. Use the **Next Period** (Program) button again to select EVE, and SLEEP and repeat the procedure until the entire set of 4 periods for Monday have been set.
11. After Monday, ZONE 1 is completely programmed, you may select **Next Day** to advance to Tuesday. You may then elect to press the **Copy Day** (Mode) button which will set up Tuesday exactly like Monday. This can be repeated as needed for each remaining day of the week. However, if copying the previous day is not desired, you may individually program each day using the **Next Day** button and repeat steps 1 through 9. Press the **Hold/End** key to exit programming mode.

NOTE: Because programming the User Interface is flexible, there may be several variations to accomplish the same result. Complete the following matrix to help you decide what time and temperatures to enter in the Comfort Schedule for each zone.

(COMFORT CHARTS MAY BE USED FOR MORE THAN ONE ZONE.)

COMFORT CHART

ZONE # ___	Wake	Day	Evening	Sleep
	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°
Monday	/ /	/ /	/ /	/ /
Tuesday	/ /	/ /	/ /	/ /
Wednesday	/ /	/ /	/ /	/ /
Thursday	/ /	/ /	/ /	/ /
Friday	/ /	/ /	/ /	/ /
Saturday	/ /	/ /	/ /	/ /
Sunday	/ /	/ /	/ /	/ /

ZONE # ___	Wake	Day	Evening	Sleep
	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°
Monday	/ /	/ /	/ /	/ /
Tuesday	/ /	/ /	/ /	/ /
Wednesday	/ /	/ /	/ /	/ /
Thursday	/ /	/ /	/ /	/ /
Friday	/ /	/ /	/ /	/ /
Saturday	/ /	/ /	/ /	/ /
Sunday	/ /	/ /	/ /	/ /

ZONE # ___	Wake	Day	Evening	Sleep
	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°
Monday	/ /	/ /	/ /	/ /
Tuesday	/ /	/ /	/ /	/ /
Wednesday	/ /	/ /	/ /	/ /
Thursday	/ /	/ /	/ /	/ /
Friday	/ /	/ /	/ /	/ /
Saturday	/ /	/ /	/ /	/ /
Sunday	/ /	/ /	/ /	/ /

ZONE # ___	Wake	Day	Evening	Sleep
	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°	Time / Heat° / Cool°
Monday	/ /	/ /	/ /	/ /
Tuesday	/ /	/ /	/ /	/ /
Wednesday	/ /	/ /	/ /	/ /
Thursday	/ /	/ /	/ /	/ /
Friday	/ /	/ /	/ /	/ /
Saturday	/ /	/ /	/ /	/ /
Sunday	/ /	/ /	/ /	/ /

A96440

NOTE: The OUT function may be used for any periods that are not occupied. Desired temperatures do not need to be set and are displayed as "--".



CONFIGURATION RECORD:

Owner/Operator _____

Date _____

Indoor Unit Model No. _____

Outdoor Unit Model No. _____

A) Hardware Configuration

- Switch 1 _____ AC/HP Select. (ON = AC)
- Switch 2 _____ 1 or 2-Speed Compressor. (ON = 1-Speed)
- Switch 3 _____ 3-Stage Electric Heat. (ON = Disable)
- Switch 4 _____ Smart Recovery. (ON = Enable)
- Switch 5 _____ Address Selection. (ON = 01)
- Switch 6 _____ Installer Test Mode. (ON = Disable)
- Switch 7 _____ Low Ambient Cooling Lockout. (ON = Disable)
- Switch 8 _____ Dual Fuel Selection. (ON = Disable)

B) Mode Settings

- _____ Hold (On or Off)
- _____ Mode (Off, Heat, Cool, Auto, Eheat)
- _____ Heating Set Point Value
- _____ Cooling Set Point Value
- _____ Fan (Auto or On)

C) Configuration Options

(See Installation and Start-Up Instructions for details regarding each setup option)

	Factory Default
2) _____ Clean Filter Timer	2
3) _____ Fahrenheit or Celsius	F
4) _____ Fan (G) ON with W	OF
5) _____ Variable Speed ICM Motor	OF
6) _____ Adjustment of Low Ambient Cooling Lockout Temperature	OF
7) _____ Variable Speed Superdehumidification	OF
8) _____ Auxiliary Heat Lockout Temperature	OF
11) _____ Dual Fuel Balance Point Setting	40
12) _____ Defrost Heat Selection	0
13) _____ Zone Temperature Offset Adjustment	0
14) _____ Heat/Cool Dead Band Adjustment	2
15) _____ Enable Auto Mode	ON
16) _____ Enable Comfort Heat / Perfect Heat mode	OF
18) _____ Humidity Offset Adjustment	0
19) _____ Outdoor Air Temperature Offset Adjustment	0
20) _____ Enable Programmable Fan	ON
30) _____ Display Damper Positions	
31) _____ Display HPT Temperature Reading	
32) _____ Display LAT Temperature Reading	
33) _____ Select LAT Shutdown Temperature	150
34) _____ User Interface Address	01
35) _____ Disable Zoning	OF
36) _____ Select HPT (HP) or LAT (LA) Sensor to Monitor Cooling	LA
37) _____ Ignore LAT/HPT Safeties	OF
38) _____ Select Auto Changeover Time	30

(Note: 1, 9, 10, 17, 21-29 are not applicable)

D) Humidity Setting

Heat Mode selection. Enter set point in selected space

- Normal Humidify _____
- Fan Humidify _____
- Auto Humidify _____
- Auto and Fan Humidify _____
- Off – no set point _____

Cool Mode selection. Enter set point in selected space.

- Normal Dehumidify _____
- Cool to Dehumidify _____
- Off – no set point _____

E) Error Code Reference

- “- -” = Zone Sensor Failure, or ALL Zone Selected
- FF = Damper Fuse Failure
- E1 = User Interface cannot communicate with Equipment Controller
- E2 = LAT / HPT Sensor Failure
- E3 = Outdoor Air Sensor Failure
- E4 = Nonvolatile Memory Failure
- E5 = Humidity Sensor Failure
- E6 = Defrost Failure