assurelink^s

Kenmore™
Smart Thermostat

Model: 105.20001410

Kenmore™

CONTENT

ASSURELINK INFORMATION

Refer to the Quick Start / Installation Guide that came with your Kenmore Smart Thermostat for detailed installation instructions. Also refer to it for information on creating an Assurelink Connected account, setting up your gateway, and setting up your thermostat for connected operation from your phone or web browser. This Use & Care Guide contains more detailed information, and instructions for operating the Thermostat from the front panel controls.

WARRANTY

KENMORE LIMITED WARRANTY

FOR ONE YEAR from the date of sale this product is warranted against defects in material or workmanship when it is correctly connected, operated and maintained according to all supplied instructions.

WITH PROOF OF SALE, return a defective product to the retailer from which it was purchased for free replacement.

This warranty is void if this product is ever used for other than private household purposes.

This warranty covers ONLY defects in material and workmanship, and will NOT pay for:

1. Damage to or failure of this product if it is not correctly connected, operated or maintained according to all supplied instructions.
2. Damage to or failure of this product resulting from accident, alteration, abuse, misuse or use for other than its intended purpose.
3. Damage to or failure of parts or systems resulting from unauthorized modifications made to this product.

Disclaimer of implied warranties; limitation of remedies

Customer's sole and exclusive remedy under this limited warranty is product replacement as provided herein. Implied warranties, including warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law. Seller shall not be liable for incidental or consequential damages. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitation on the duration of implied warranties of merchantability or fitness, so these exclusions or limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears Brands Management Corporation, Hoffman Estates, IL 60179
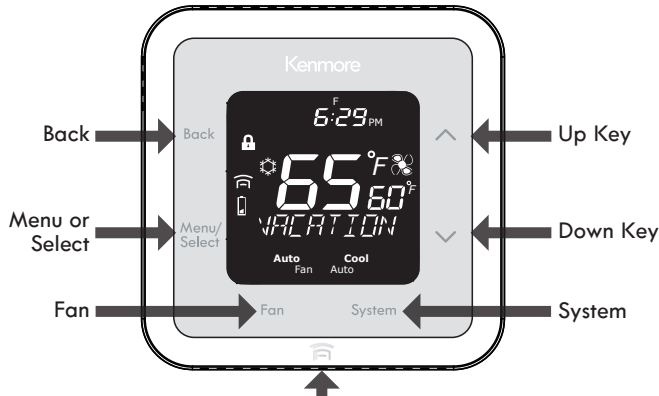
IMPORTANT SAFETY INSTRUCTIONS

When using your equipment, basic safety precautions should always be followed to reduce risk of fire, electric shock, and injury to persons, including the following:

1. Read all of the instructions listed here and/or in the user manual before you operate the device. Give particular attention to all safety precautions. Retain the instructions for future reference.
2. This device must be installed and used in strict accordance with the installation manual and/or use and care guide.
3. Comply with all warning and caution statements in the instructions.
4. The thermostat can be powered by two AA batteries or by a connection to a 24VAC power source (C-wire). Always install the 2 AA batteries so that they will run the Smart Thermostat in case of a power failure.
5. Never connect any terminal of the thermostat to 120/220V AC; this may cause serious damage to the thermostat and even your HVAC system.
6. Do not install this thermostat at an altitude of over 6500 feet (2000 meters).
7. This standalone mounted electronic thermostat serves as a temperature control system only in dry, closed living or office spaces. Do not place it in a bathroom or area of excessive moisture. Do not allow it to get wet.
8. This device should not be used in an environment that is below 32°F (0°C) and above 104°F (50°C), humidity above 80%.
9. Do not expose the thermostat to voltage fluctuations of more than+/-10%.
10. Clean the thermostat with a dry, soft cloth. Do not use solvents or aggressive cleaning agents. NEVER use detergents, gasoline, glass cleaner, furniture polish, paint thinner, or other household solvents to clean any part of the thermostat.
11. Never place anything over the air vents of the thermostat.
12. Never drop any liquid or chemical inside of the thermostat through the air vents.
13. DO NOT use outdoors.
14. DO NOT attempt to repair or adjust any electronic or mechanical functions on this thermostat. Doing so will void your warranty. The inside of the unit contains no user serviceable parts.

NOTE: DO NOT block air vents of the thermostat.
NOTE: Incorrect connection of HVAC wires to thermostat terminals may cause unrecoverable damage to your HVAC system. Incorrect wiring connection voids all thermostat warranty coverage. Nor is thermostat seller or manufacturer responsible for any HVAC system damage due to incorrect wiring connection.
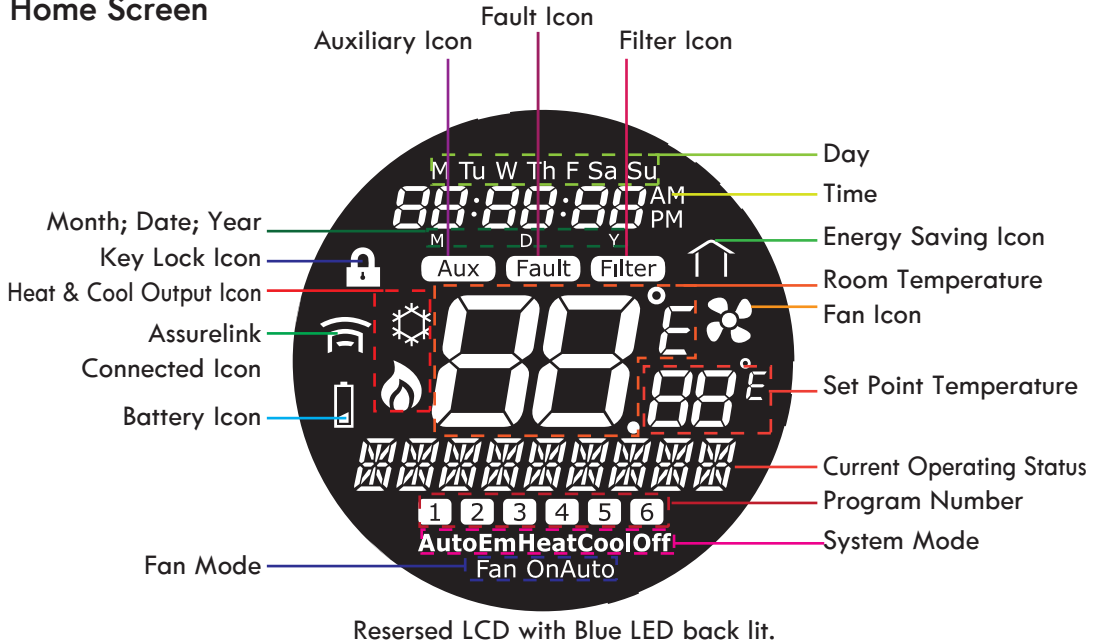
FEATURES / OPERATION

Reset Button (located at the bottom part of the Kenmore Smart Thermostat)

KEY/TOUCH ACTION	FUNCTION
Up Key	Increase set temperature for TEMP HOLD or PERM HOLD. Also used with Down key to activate "Key Lock"
Down Key	Decrease set temperature for TEMP HOLD or PERM HOLD. Also used with Up key to activate "Key Lock"
System Key	Switching operating mode: AUTO, HEAT, COOL, OFF, & EMERGENCY HEAT
Fan Key	Switching fan mode: ON or AUTO
Menu / Select Key	Press Menu / Select once and use Up/Down Key to navigate the following functions: • Vacation • Clock • Program • Settings • Filter • When the thermostat shows the function you want to set up, press Menu/Select once again to enter that function. • For modifying parameters, use Up/Down to change and Menu/Select to confirm the setup value.
Back Key	• At any time during Setup, pressing Back once will navigate backward one level and cancel any setting change you have made. • Pressing and holding Back for 2 seconds while in a Menu screen will return the unit to the Home Screen. Pressing and holding Back for 2 seconds while on the Home Screen will cancel Temp Hold, Perm Hold, Vacation mode, and Away mode. (Away mode is only available via the Assurelink remote APP.)
Reset Button	Reset the thermostat. Can also used for installation setup and to remove the thermostat from customer's Assurelink account. See Assurelink APP for details.

FEATURES / OPERATION

Home Screen

Auxiliary Icon

Fault Icon

Filter Icon

M Tu W Th F Sa Su

Day

Time

Month; Date; Year

Key Lock Icon

Heat & Cool Output Icon

Assurelink

Connected Icon

Battery Icon

Aux Fault Filter

Energy Saving Icon

Room Temperature

Fan Icon

Set Point Temperature

Current Operating Status

1 2 3 4 5 6

Program Number

AutoEmHeatCoolOff

System Mode

Fan Mode

Fan OnAuto

Resersed LCD with Blue LED back lit.

The Home Screen is the default display screen. It is normally dark. Press any key once to turn on the display. It will remain on for 20 seconds. If no further keys are pressed, it will become dark again. If you are within any of the setup menus, the display will stay on for one minute, and turn dark if no further keys are pressed. The display will remain on while pressing keys to make settings changes within the menus. The unit will return to the Main Screen if no keys are pressed in a minute, and turn off.

The large temperature reading on the Home Screen is the current air temperature. The small temperature reading is the current set point temperature.

FEATURES / OPERATION

Quick Change of Set Temperature for Temporary Hold and Permanent Hold
To increase the temperature, press Up when the thermostat is on the Home screen. To decrease
the set temperature, press Down. Press once for each degree of temperature change.
The latest set temperature will be stored and held until the next scheduled temperature change.
This will be displayed as TEMP HOLD. To make the adjusted setting permanent, press and hold
the Up or Down key for two seconds or until the display says PERM HOLD. To exit from TEMP or
PERM hold, press and hold the BACK key for 2 seconds, the thermostat will return to the
programmed schedule mode, displayed as SCHEDULE.

Set Heat/Cool Mode
When you are on the Home screen, press System to change the HVAC system mode to one of
the following:
-        Auto, Heat, Cool, Off or Emergency Heat (for Heat Pump systems)

Set Fan Mode
When you are on the Home screen, press Fan to change Fan mode to one of the following:
-        Fan On, or Fan Auto
When the fan is running, the Fan icon will show in the display.

Setup Menu
Press Menu / Select, then press up or down to select one of the following setup functions:
-        Vacation
-        Clock
-        Program
-        Settings
-        Filter

Vacation
Enter Vacation setup by pressing Menu / Select. Once within Vacation setup, set the start date
by entering Month, Day and Year. Use Up/Down to change the value and press Menu / Select
to confirm each. Similarly, set up the end date. The thermostat will also ask to set up the
temperature during vacation. For example, during winter, you can set to a low temperature such
as 55° F, to prevent house water pipes from freezing.

FEATURES / OPERATION

Clock
Enter Clock Setup by pressing Menu/ Select. Set the Time Zone with the Up & Down keys. Press Menu/Select to confirm. Then select 12 Hr or 24 Hr Clock View with the Up & Down keys. Press Menu/Select to confirm. Continue to use the same method to select the Hour, Minute, Month, Day, Year, and to choose Daylight Savings Time On or Off. Press Menu/Select to confirm, and Back to exit.

Program
There are three types of programming modes:
- 5/2 (Weekday and Weekend) schedule
- All days the same
- 7 days individual schedule

Enter Program setup by pressing Menu / Select. Once within the Program menu, you have to select the mode. Initially, "M Tu W Th F" will flash on the screen. If you press Menu / Select to confirm, you are selecting the 5/2 days mode. You will be asked to set up the Time, Heat Set point and Cool Set point for six time periods within the day. Once the five weekdays are set, you will be asked to input the weekend schedule programs.

If you would like to set up all seven days the same, skip the flashing "M Tu W Th F" and "Sa Su" by pressing Up. You will see all seven days "M Tu W Th F Sa Su" flashing together. You can confirm by pressing Menu / Select, and start to input the six time periods within the day.

If you would like to have seven days of individual programming, skip the all days the same setup and confirm with individual day. You have to set up each day one by one with the same procedure.

Hint: To set up less than 6 specific periods, simply set up 2 or more periods the SAME. The identical periods will act as one period. Also, the thermostat will only allow you to set up periods that are at least one hour apart.

Settings
Enter Settings setup by pressing / Menu Select. Use to access the settings of the thermostat functions. There are five functions under Setting that can be navigated using the Up and Down buttons:

FEATURES / OPERATION

- Display Installation setup
  This menu will show the current HVAC system setting that was set up during installation. It
  should display one of the following:
  NHP-HE-C   (Electric heat with air conditioning)
  NHP-HG-C   (Gas heat with air conditioning)
  NHP-HE-NC   (Electric heat without air conditioning)
  NHP-HG-NC   (Gas heat without air conditioning)
  HP-O   (Heat Pump with O reverse valve)
  HP-B   (Heat Pump with B reverse valve)

- Set Temperature Unit in °F or °C
  Use Up or Down to select °F or °C for all temperature displays. Press Menu Select to confirm
  the selection.

- Set Temperature Offset
  The Kenmore Smart Thermostat has been factory calibrated so you usually do not need to set
  any temperature offset. However, in some rare situations you find that the temperature is not
  accurate enough, you can use this function to offset the displayed temperature from -7°F to
  +7°F (-4°C to +4°C).

- Set Auto Recovery
  For multi-stage systems, the thermostat supports an auto recovery algorithm when there is any
  set point change scheduled. If enabled, it will turn on the HVAC system earlier to avoid the
  HVAC system needing to turn on a second or higher stage. This permits a gradual change of
  temperature before the set time, rather than a sudden change at the set time. Under this menu,
  you can select YES or NO to enable or disable auto recovery function.

  Set Span and Dead Band of thermostat control
- There are two key parameters for thermostat control: Span and Dead Band.

  The Span defines the maximum possible range of the temperature variance from the set
  temperature. For example, if you set the temperature to 70°F and set Span to 1°F, the
  temperature will swing from 69° F to 71°F. The Span setting range is from 0.5°F to 2°F (0.25°C
  to 1°C).

FEATURES / OPERATION

Dead Band is used for automatically changing the HVAC system modes from Heat to Cool or Cool to Heat. If the room temperature keeps going in the opposite direction from the current mode and exceeds the Dead Band temperature, the Kenmore Smart Thermostat will automatically switch to the alternate mode. Example: The Dead Band is set to 5° F and the thermostat is set to Cool mode at 70°F. If the room temperature drops down to 65°F, the system will switch from Cool to Heat mode. The Kenmore Smart Thermostat can set the dead band from 2°F – 5°F (2.5°C – 6°C).

Filter
Enter Filter setup by pressing Menu / Select.
You can set the number of hours before the thermostat will remind you to install a new filter. There is a selection for 300, 500 and 700 hours. You can also reset the count to zero when you change the filter.

Key Lock
To lock the keys and prevent them from being used, hold Up and Down together for 2 seconds. A lock icon will appear. To unlock the keys for use, repeat the same process, the lock icon will disappear.

Remove Thermostat from Customer Assurelink Account
Press the Reset button on the bottom of the thermostat with a paper clip. When all the icons are visible on the screen, press Up & Down for 2 seconds. Use the Up and Down keys to select the "Yes" or the "No". Now press Menu/Select. If you selected "No", the thermostat will return to the Main Screen. If you selected "Yes", the "ReqDelete" screen will appear for 3 seconds, then the Main Screen will return. The thermostat has been removed from the customer's online Assurelink account.

CLEANING / MAINTENANCE INSTRUCTIONS

When the low battery icon is ON, replace the batteries immediately. Don't leave any used up battery in the thermostat. The chemical leakage of drained batteries may damage the thermostat and cause it to malfunction.

SPECIFICATIONS

Temperature unit	°F / °C
Operating temperature	32-113 °F / 0-45 °C
Indoor temperature measurement range	40-99 °F / 5-37 °C
RF frequency	908.50-919.74MHz
RF range	Up to 1300 ft (400 m) line of sight
Battery Power	2 x AA Alkaline battery
A/C power (optional)	18-30 V AC between R and C terminals
Size	4.2" (L) x 4.2" (W) x 1.1" (H)inches 10.7 (L) x 10.7 (W) x 2.9 (H)cm
Weight	0.76 lb / 345 g

FCC STATEMENTS
FCC Interference Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

·   Reorient or relocate the receiving antenna.
·   Increase the separation between the device and receiver.
·   Connect the equipment into an outlet other than the receiver's.
·   Consult the dealer or an experienced radio/TV technician for assistance.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

INDUSTRY CANADA (IC) STATEMENT
This Class B digital apparatus complies with Canadian ICES-003.
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

TROUBLESHOOTING

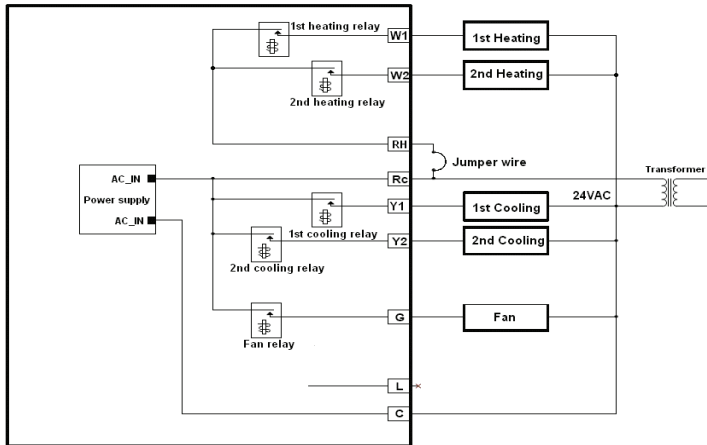| TROUBLE	PROBABLE CAUSE	SOLUTION
• No Display when touching the keys	* Batteries are depleted * For 24 VAC connected thermostat, the RH/RC or C cable may be disconnected. * Furnance turned off.	√ Replace the batteries √ Check the connections and correct them √ Turn the HVAC system back on.
• Low battery icon is ON	* Battery level low	√ Replace the batteries
• No Assurelink icon displayed, or can't control the thermostat through the smart phone App	* Can't connect to cloud server * RF signal can't reach the thermostat	√ Check the Gateway Ethernet connection √ Check the availability of Internet access √ Move the Gateway closer to the thermostat
• Filter icon is ON • Room temperature showing H or L instead of digits	* Filter life expired * The HVAC system may turn OFF under an extreme high or low temperature environ- ment.	√ Change filter then reset the filter counter. Refer to the Filter section under Feature/Operation. √ Turn ON the HVAC system with the thermostat and wait for about 15-30 minutes; it should display the room temperature again. If the environment temperature is not normal, call for service for your HVAC system.
• Can't use the touch keys when the home screen is showing	* The unit has been set to Key-Lock	√ To release the Key-Lock, press Up and Down together for about 2-3 seconds. To activate the Key-Lock, press Up and Down together for about 2-3 seconds.
• The HVAC system stopped regulating the temperature with the set point	* The mode of operation is not selected according to the season. For example, selecting Heat mode in summer.	√ Manually change the operating mode by pressing System button. You can also select Auto so the thermostat will determine for you the mode of operation automatically.

FREQUENTLY ASKED QUESTIONS

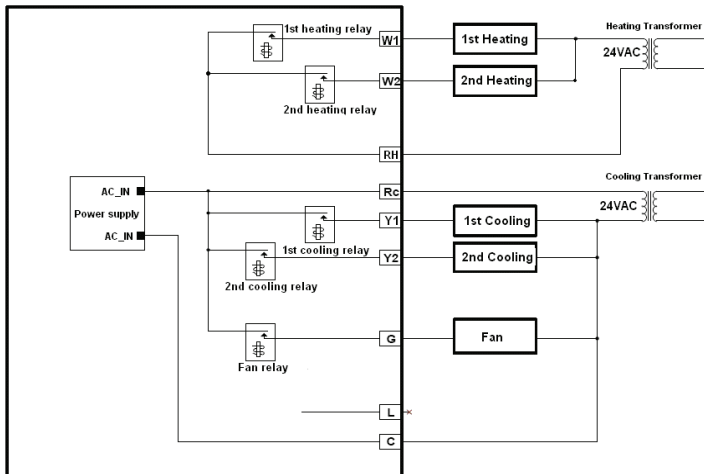| QUESTION	ANSWER
• How can the thermostat help to save energy?	√ Use the Schedule Program to set the temperature that consumes less energy. For example, lower the temperature in winter during a period in the days that your family is usually not at home. √ Turn OFF the heating and/or cooling through your App. Don't forget to turn it back on.
• Shall I change Heat/Cool mode manually?	√ You can manually select Heat or Cool mode for the HVAC system. However, you can also select Auto so the thermostat will determine for you the mode of operation automatically.
• How to select the filter time?	√ Refer to the filter description. It depends on the filter type. You can set 300, 500, 700 of fan operation at the thermostat.
• Can I prevent children from changing the set temperature accidentally?	√ You can lock the keys by holding Up and Down key together for about 2-3 seconds.
• Can the thermostat display in Celsius instead of Fahrenheit?	√ Yes, through Menu Select and Up/Down key, select SETTING > TEMP UNIT > C.
• Can I use the thermostat for heat pump HVAC System?	√ Yes, the thermostat supports all common type heat pump HVAC systems. Installer will setup the appropriate system for you under installation mode. Please refer to Installation Manual.

Appendix

WIRING DIAGRAM
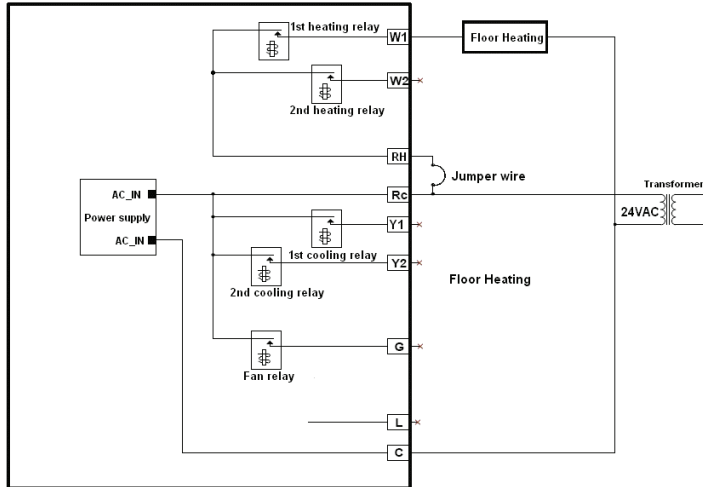Wiring Diagram for Conventional Heat Cool Single Transformer System

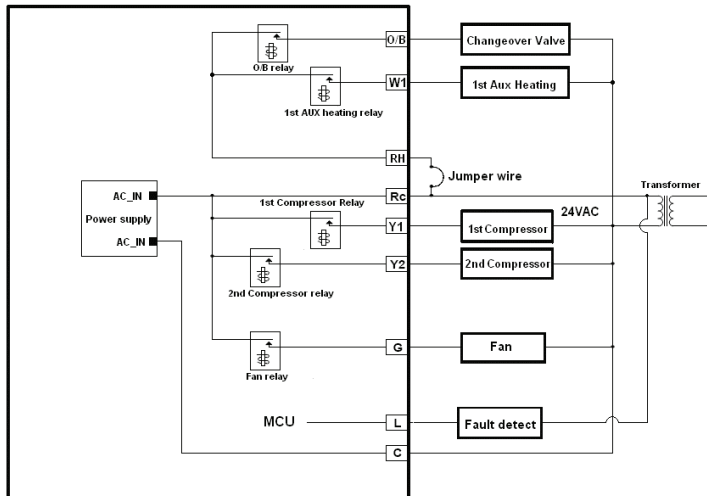Wiring Diagram for Conventional Heat Cool Two Transformer System

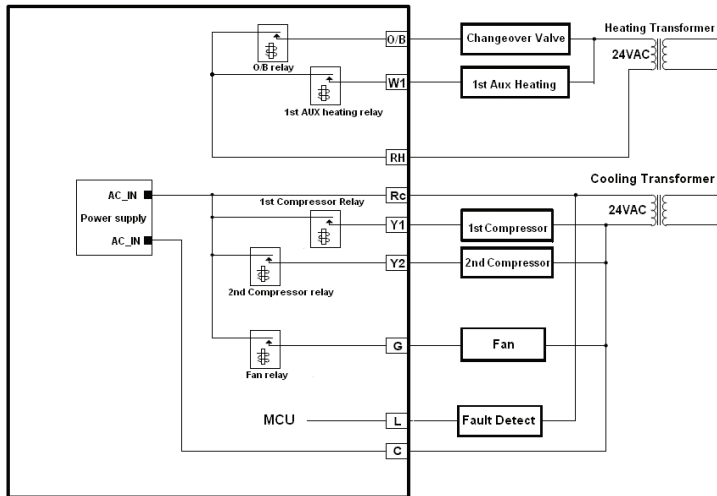# Appendix

Wiring Diagram for Floor Heating System

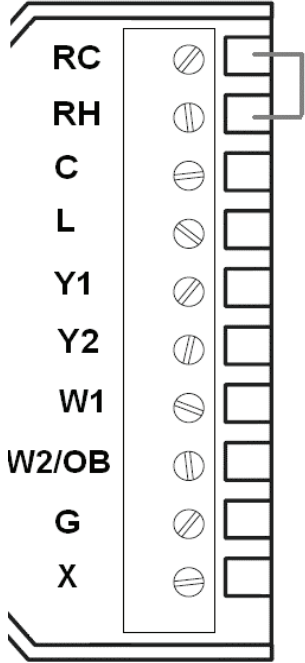Wiring Diagram for Heat Pump Single Transformer System

Appendix

Wiring Diagram for Heat Pump with two Transformer System

Appendix

Terminal Definition

	Terminal HP	Terminal Non-HP	Heat Pump System	Conventional System
RC	RC	RC	24VAC Power supply for Cooling side	
RH	RC	RH	24VAC Power supply for Heating side	
C	C	C	24 VAC common for control circuit and thermostat power input	
L	L		System Monitor	No use
Y1	Y1	Y1	1st stage compressor	1st stage cooling
Y2	Y2	Y2	2nd stage compressor	2nd stage cooling
W1	W1	W1	Emergency Heat	1st stage heating
W2/OB	O/B	W2	Changeover valve	2nd stage heating
G	G	G	Fan	
X	X	X	Reserved for future use	