



# Home Director Owner's Manual

#### Second Edition May 1999

#### The following paragraph does not apply to any state or country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. References to IBM products, programs, or services do not imply that IBM intends to make them available outside the United States.

This publication could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be made in later editions. IBM may make improvements and/or changes in the product(s) and/or program(s) at any time.

Address comments about this publication to Product Support Manager -- IBM Home Director, IBM Corporation, 3039 Cornwallis Rd., Dept.LFXA, Research Triangle Park, NC 27709-2195 USA. Information you supply may be used by IBM without obligation.

For copies of publications related to this product, call toll free 1-800-IBM-7282 in the Continental U.S.A. In Canada, call toll free 1-800-465-7999.

#### Copyright International Business Machines Corporation 1999. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights -- Use, duplication, or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.



# Notices

### Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the user's responsibility.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the IBM Director of Licensing, IBM Corporation, 500 Columbus Avenue, Thornwood, NY 10594.

#### **General Information**

Intended use.

The IBM Home Director system (hardware and software) is intended for use in standard residential construction. Supported system functions are listed in the IBM *Official Published Specification* for Home Director.

The Home Director system is not intended for commercial use. Certain types of equipment should not be used in conjunction with the Home Director system. Examples of these devices include, but are not limited to, medical equipment (heart monitor, dialysis, oxygenequipment, etc.) and critical environmental systems (chemical exhaust fans, wastecontrol systems, freeze protection systems, etc.). Additional user precautions should be taken where excessive hot or cold temperatures could result in potentially harmful conditions for individuals.

Important Notice.

All components in the Home Director system have 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 residentialinstallation. This equipment generates, uses, and can radiater adiof requency 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 turning the equipment 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 equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult an IBM authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modificationstothis equipment. Unauthorized changes ormodifications could void the user's authority to operate the equipment.

All components in the Home Director system comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) these components may not cause harmful interference, and (2) these components must accept any interference received, including interference that may cause undesired operation.

**Responsible Party:** 

International Business Machines Corporation New Orchard Road Armonk, NY 10504 Telephone: 1-919-543-2193

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conform à la norme NMB-003 du Canada.

#### Safety Information

To avoid possible hazards due to fire or electrical shock, or damage to the unit, do not touch any cables or perform installation, maintenance, or reconfiguration of this unit when there is lightning in the area.

Do not attempt to undertake actions other than those specifically described in this *Owner's Manual*. This is particularly true if youtry to service or repair the power supply, (if included) or cables. Always referservice or repairs to qualified service personnel. For further details concerning option installation, configuration, or repair, please refer to IBM document #SD21-0030-04.

#### Trademarks

The following terms are trademarks or registered trademarks of the IBMC or poration in the United States or other countries or both:

- IBM
- Home Director

Other company, product, and service names may be trademarks or service marks of others.

Microsoft, Windows, and the Windows 95 logo are trademarks or registered trademarks of Microsoft Corporation.

## Conventions used in this book

## Highlighting

There are several ways that text is highlighted in this book. Each highlighting convention has a specific purpose.

Highlight	Purpose
Bold	Bold font is used to identify items on the screen which you should click or double-click. Bold font is also used in headings, table titles, and numbered lists.
Example	Examplefont is used to show text that you need to type from your keyboard.
Italic	Italic font is used to show proper names of programs or books. Italic font is also used in table footnotes and side notes.
"Quotes"	Quotation marks are used to identify window, screen, and heading names.
<u>Underline</u>	Underline font is used to call special emphasis to a particular word or instruction.

# Table of Contents

i	Home Director Owner's Manual
iii	Notices
v	Notices
V	General Information
vi	Safety Information
vi	Trademarks
vii	Conventions used in this book
vii	Highlighting
ix	Table of Contents
1	License Agreement
3	IBM Program License Agreement
3	Warranty
4	Limitation of Liability
5	Hardware
7	Using the Home Director hardware
7	System Components
7	Using the Home Network Controller
7	Home Network Connection Center
8	Using the remote control
11	Using the thermostat wall display
12	Calibrating the temperature on the thermostat wall display
13	Using a dimmer switch
14	Using a 4 button wall controller switch
15	Home Director Channel
17	Using the Home Director channel
17	Selecting an item
18	Controlling thermostats
18	Viewing thermostat settings
19	Changing thermostat modes and temperature settings
21	Changing the fan settings
21	Allowing or not allowing changes to thermostat settings from routines
23	Monitoring the security system
24	Controlling devices
24	Viewing device settings

25 Turning a device on or off

25	Using the Bright option for a device (incandescent lights only)
26	Allowing or not allowing changes to devices from routines
28	Controlling routines
28	Viewing routine settings
29	Viewing a schedule for a routine
29	Changing a schedule
31	Allowing or not allowing routines to run from schedules
32	Starting and stopping a routine
34	Changing Home Director configuration settings
34	Changing the date and time
35	Turning sounds on or off
37	Troubleshooting
39	Diagnosing and recovering from problems
40	Remote control
42	Home Director channel
43	Uninterruptible power supply
43	Home Network Connection Center
45	Devices
45	Routines
46	Thermostat wall display
47	Getting Help
49	Obtaining service and support
49	Printed documentation
49	IBM Authorized Home System Integrator
49	IBM
51	Appendix A: Installation Information
53	Important Information
55	Index



## **IBM Program License Agreement**

International Business Machines Corporation

Armonk, New York 10504

This Program License Agreement ("Agreement") governs your use of the programs IBM provides with your Home Director system ("Programs"). Any programs IBM may include with your Home Director system which come with their own license agreements are subject to the terms of their own license agreements and, unless otherwise expressly provided by IBM, IBM provides these programs to you "AS IS" WITHOUT WARRANTIES OF ANY KIND.

PLEASE READ ALL LICENSE AGREEMENTS CAREFULLY, BEFORE USING THESE PROGRAMS. BY USING THESE PROGRAMS, YOU ACCEPT THE TERMS OF THESE AGREEMENTS. IF YOU DO NOT AGREE, PROMPTLY RETURN YOUR HOME DIRECTOR SYSTEM FOR A REFUND.

Programs licensed under this agreement are owned by International Business MachinesCorporationoritssubsidiaries(IBM), or IBM's suppliers and are copyrighted and licensed, not sold.

The term "Programs" means the original Programs and all whole or partial copies of it, including portions merged into other programs.

IBM grants you a non-exclusive license for the Programs. This license applies to Programs, including any replacement Programs, regardless of the manner in which they are distributed.

Under this license, you may:

- 1 use each Program on only one Machine at any one time;
- 2 copy each Program for backup purposes; and
- 3 merge it into another program.

Any time you make a copy, or partial copy, of any Program, you must reproduce and include the copyright notice(s) and legends on such copy.

You may transfer your license rights in a Program to another party. To do so, you must first transfer a copy of this Agreement, all other documentation, and at least one complete, unaltered copy of the Program to the other party. Your license is then terminated. You must destroy all other copies of the Program. IBM licenses the other party when that party accepts the terms of this Agreement by initial use of the Program.

You may not:

- 1 use, copy, merge, or transfer the Program except as provided in Agreement;
- 2 reverse assemble or reverse compile BIOS or any Program; or
- 3 sublicense, rent, lease, or assign any Program.

#### Warranty

IBM provides the Programs licensed under the terms of this Agreement, "AS IS", WITHOUT WARRANTIES OF ANY KIND. IBM does not warrant uninterrupted or error-free operation of a Program.

AnytechnicalorothersupportprovidedforaProgram, such as assistance viate lephone with "how-to" questions and those regarding installation and usage will be provided "AS IS" WITHOUT WARRANTIES OF ANY KIND.

THESE WARRANTIES REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

#### **Limitation of Liability**

Your soleremedy under this Agreement is set for thin this section. Circumstances may arise where, because of a default on IBM's part (including fundamental breach) or other liability (including negligence and misrepresentation), you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages, IBM is liable only for (i) bodily injury or damage to real property or tangible personal property and (ii) the amount of any other actual damages only and will be limited in each such instance to the greater of 1) \$5,000 or 2) the money paid to IBM, or its Authorized Seller, for the System.

IN NO EVENT WILL IBM BE LIABLE FOR ANY LOST PROFITS, LOST SAVINGS, THIRD PARTY DAMAGES, INCIDENTAL DAMAGES, OR OTHER ECONOMIC CONSEQUENTIAL DAMAGES, EVEN IF IBM OR ITS AUTHORIZED SELLER HAS BEEN ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES.

This limitation of remedies described in this section also applies to any developer of a Program supplied to IBM. IBM's and the developer's limitations of remedies are not cumulative. Such developer is an intended beneficiary of this section.

SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OR EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OF EXCLUSION MAY NOT APPLY TO YOU.



### Using the Home Director hardware

This section gives you an overview of the major system components that come with a basic installation and how you can use them. If you need additional information about a particular component, please refer to the documentation that came with it (if available).

#### System Components

Component	Description
Home Network Controller Cabinet	Cabinet housing the Home Director Dedicated Computer, UninterruptiblePowerSupply(UPS),HVACController,Video Modulator, and Infrared (IR) remote control receiver.
Home Network Connection Center	Cabinet housing the telephone, video, camera, Web Point, Ethernet, and power distribution modules.
Remote control	Hand held device used to interact with the Home Director channel.
Thermostat Wall Display	Digital thermostat controls you can use to manually control the temperature.
Dimmer Switches	Switches you can use to have manual or automated control for on/off and dimming of lights.
4 Button Wall Controller Switches	Switches you can use to have manual or automated control of lighting and/or up to four pre-programmed routines.

#### Using the Home Network Controller

The cabinet has a key lock on the outside. You should use the lock to prevent unauthorized access to the cabinet and to prevent cables from accidentally being unplugged.

We recommend that you have a copy of the key made. Be sure to store the key in a safe place.

Under normal conditions, you will be able to use the Home Director system without needing to open Home Network Controller cabinet. If you have problems with the Home Network Controller, you should contact your IBM Authorized Home Systems Integrator (Integrator).

#### Home Network Connection Center

You may need to open the Home Network Connection Center to redirect services (for example, changing telephone or video wires). If you have problems with the system, you should follow the instructions in "Troubleshooting" on page 37.

## Using the remote control

You can use the Home Director remote control in any room of your home that has a television and an Infrared receiver connected to the Home Network Controller. The remote control has these features:



Feature	Description
Infrared sender	The infrared sender is located on the front of the remote control. Thissendercommunicates the remote control signal to the infrared target located near your television.
Trackball	The trackball is located on the top of the remote control. Use the track ball to move the on-screen highlight to the button you wish to use.
Select button	The Select button is located on the bottom of the remote control. Use the button as the primary way to select an object on the screen.
Resume button	The Resume button is located on the top of the remote control. Use the button to bring the remote control out of its power saving mode if it has not been used for one minute or longer.
Battery cover	The battery cover is located on the bottom of the remote control. It protects the batteries.
Battery indicator light	The battery indicator is located on the back of the remote control. The light is lit when the battery power is low.

The remote control allows you to interact with the Home Director channel. To use the remote control, follow these instructions:

1 Switch your television to the channel that has been assigned to the Home Director channel.

The Home Director main menu displays and looks similar to this:



- 2 Hold the Home Director remote control so that the infrared sender is pointed toward the infrared target. The target should be located on or near the television.
- 3 Use your thumbor finger to slowly move the trackball. The on-screen highlight moves around the screen in the direction you move the trackball.

To select an item on the screen, click the Select button on the bottom of the remote control.

To change the remote control batteries:

- 1 Hold the remote control in one hand so the battery cover is facing up.
- 2 Place the thumb of your other hand in the indentation on the cover where you see the word "OPEN".
- 3 Gentlypullthebatterycovertoward the back of the remote control until it unlocks and slides off.



- 4 Remove the batteries from the battery compartment.
- 5 Insert two AAA type batteries into the battery compartment. Make sure the "+" symbol printed on the battery matches the "+" symbol on the inside of the battery compartment.
- 6 Replace the battery cover:
  - a Align the three tabs in the cover with the grooves on the remote control.
  - b Gently slide the cover toward the front of the remote control until the tab locks into place.



The Home Director remote control operates even if you have not switched your televisiontotheHomeDirector channel. Make sure that the remote control is stored in a safe place to avoid accidental configuration changes.

#### Power saving mode:

The remote control has a power saving feature to preserve battery life. If you do not use the remote control for one minute or longer, it automatically switches into power saving mode. When the remote control is in this mode, you cannot move the on-screen highlight or click with the left mouse button.

To "wake up" the remote control, click the Resume button on the top of the remote. The remote control resumes normal operation.

Cleaning the remote control.

If the on-screen highlight on the Home Director channel moves only in one plane (horizontally or vertically) or is sluggish, you may need to clean the trackball in the remote control.

To clean the remote control:

- 1 Remove the batteries from the remote control by sliding the bottom of the remote back.
- 2 After you remove the batteries, turn the remote control over and hold it in one hand with the front of the remote control pointing away from you.
- 3 Take a ball point pen and insert the pen tip into the small indentation located in front of the trackball.
- 4 Turn the cover counter clockwise until it stops (about 1/2 inch).
- 5 Turn over the remote control into your other hand to remove the trackball.
- 6 Clean the trackball with a small amount of mild detergent in water and dry it with a lint free cloth.
- 7 Place the trackball on the cover so that it does not roll.
- 8 Clean the two plastic rollers inside the socket by gently rubbing each roller perpendicular to the roller with a cotton swab dipped in isopropyl alcohol. Rotate the rollers to ensure that the entire roller is cleaned.



Brush cotton swab in direction of arrows

- 9 Make sure that the inside of the socket is dry before replacing the trackball into the socket.
- 10 Place the cover on to the remote control so that the indentation is aligned with the notches. The cover should fit into place so that it is flush with the top of the remote control.
- 11 Takeaballpointpenandinsertthepentipintothesmallindentationandturnclockwise (right) until it stops (about 1/2 inch).
- 12 Replace the batteries.

## Hardware

#### Using the thermostat wall display

The thermostat wall display allows you to manually control the temperature in your home. You can use the buttons on the front of the wall display to:

- · Raise or lower the temperature
- · Change the thermostat mode
- Change the fan mode

The thermostat wall display looks like this:



To raise or lower the temperature:

Before you begin, make sure the current temperature is visible.

- Press the <u>button one time to view the set point, or target temperature.</u> Press the button again to raise the set point temperature one degree.
- Press the  $\bigtriangledown$  button one time to view the set point temperature. Press the button again to lower the set point temperature one degree.

To change the thermostat mode:

You can choose from the following modes:

- "O" Off
- "C" Cool
- "H" Heat
- "A" Automatic

When you press the mode button once, the current mode displays. If you press the button again while the current mode is displayed, the system switches to the next mode. The system stays in the last mode displayed on the screen.

To change the fan mode:

You can choose to have the fan stay on all the time or come on automatically. When you press the fan button once, the fan turns on. If you press the button a second time, the fan is set to come on automatically.

Changing the offset value on the thermostat wall display

The current temperature from the internal digital temperature sensor displays on the thermostat wall display. The sensor has an accuracy of  $\pm 1^{\circ}F(\pm .5^{\circ}C)$ . You can adjust the offset value number for the temperature on the thermostat wall display.

Understanding the offset value.

The offset value is a number from 0 to  $\pm$ 7 that you can use to adjust the temperature that displays on the thermostat wall display. The factory default is usually 0 (zero), but may be set to a factory offset also. The offset value number is added to the temperature of the internal digital temperature sensor and the adjusted temperature then displays.

For example, if the display shows 70 degrees but you want the temperature to display 72 degrees instead, you would change the offset value by increasing it 2 degrees. If the offset value was 0 degrees, then the new offset would be 2 degrees, which is the new offset value number that displays in "change offset" mode on the thermostat wall display.

Note: To increase or decrease the temperature in the home, follow the instructions in "To raise or lower the temperature:" on page 11.

Viewing and changing the offset value.

To view and change the offset value, perform the following steps:

- 1 To switch to "change offset" mode, press and hold the MODE button and then press the FAN button until "CO" displays.
- 2 Release the buttons and the current offset value number displays. The offset value number is usually 0 (zero) but the maximum range is ±7.

Note: If you are viewing the offset value and do not make any changes, the current temperature automatically displays after 20 seconds of no activity.

- 3 Determine how many degrees you want to change the temperature offset value number (maximum range is ±7 degrees).
- 4 Adjust the offset value by pressing the UP or DOWN button. Each press of the UP button increases the offset by 1 degree. Each press of the DOWN button decreases the offset by 1 degree. The offset number displays and changes accordingly as you press the UP or DOWN button.
- 5 When you are finished adjusting the offset value, the thermostat wall display automatically stores the new offset number. The current temperature displays after 3 seconds of no activity.

Thenew temperature offset is calculated and displays on the next temperature update cycle. It can be several seconds before you see the temperature change.

Using a dimmer switch

Adimmerswitchcontrolsasinglelight. Youcanmanuallyturnonalightbypressingthe switch or automatically turn on a light with the Home Director channel. You can also brighten or dim an incandescent light. A dimmer switch has these features:



To manually turn the light on or off:

- 1 Select the switch for the light you want to turn on or off.
- 2 Press and release the top of the switch to turn the light on.
- 3 Press and release the bottom of the switch to turn the light off.

When the switch is turned off, the indicator light turns on. This light can help you locate the switch if the room is dark.

To manually brighten or dim an incandescent light:

- Tobrighten the light, press and hold the top of the switch until the light brightens to the setting you prefer.
- To dim the light, press and hold the bottom of the switch until the light dims to the setting you prefer.

Note: Some switches have minimum dim levels. Contact your Integrator for this information.

To return to the last saved dim setting:

If you select a dim setting and then turn the light off, the dim setting is saved. The light returns to the saved dim setting the next time you turn the light on.

If you do not want to return to the dim setting, press and hold the top of the switch until the light brightens to the setting you prefer.

Using the safety switch:

The safety switch locks the entire light switch into the off position. This prevents the light from being turned on by another switch or a Home Director routine while you are changing a light bulb.

To use the safety switch:

- 1 Turn the light switch off (the indicator light turns on).
- 2 Place your fingernail (or a very small screwdriver) under the bottom edge of the safety switch.
- 3 Gently pull out on the safety switch.

When the safety switch is properly pulled out, the indicator light turns off.

- 4 Change the bulb.
- 5 Press the safety switch in until the indicator light turns on.

To automatically control lights:

ForinformationoncontrollinglightsautomaticallywiththeHomeDirectorchannel, see "Controlling devices" on page 24.

#### Using a 4 button wall controller switch

A4button wall controller switch can control up to 4 lights or routines. These lights and routines are turned on or off manually by pressing the switch or automatically by the Home Network Controller. A 4 button controller switch has these features:



To manually control a light or routine:

- 1 Select the switch that controls the light you want to turn on/off or the routine you want to start/stop.
- 2 Press the left side of the switch to turn the light on or to start the routine.

The indicator light next to the switch turns on.

3 Press the right side of the switch to turn the light off or stop the routine.

The indicator light next to the switch turns off.





# **Chapter 3: Home Director Channel**

## Using the Home Director channel



You can return to the Home Director main screen by movingtheon-screenhighlight to the Home Director logo in the top right corner of any screen and then clicking the Select button on the bottom of the remote control. To start using the Home Director channel, turn on your television and choose the channel your IBM Authorized Home Systems Integrator (Integrator) designated for Home Director. The Home Director main screen displays with the "Devices" item automatically highlighted.



You can access the following items from the Home Director main screen:

Thermostat 1 and Thermostat 2

Note: In the above example of the Home Director main screen, the Integrator named the thermostats "Downstairs" and "Upstairs". Your thermostatitems may have been named differently.

- · Security system
- Devices
- Routines
- · Configuration (time, date, and sound)

#### Selecting an item

Use the remote control to select items that display on the Home Director channel.

To select an item.

1 Point the remote control toward the infrared target located near your television.

Note: You may need to "wake up" the remote control if it is not used for one minute or longer. To resume normal operation, click the Resume button on the top of the remote control.

- 2 Useyourthumborfingertomovethetrackball. Theon-screenhighlightmoves around the screen in the direction you move the trackball.
- 3 When the item you want is highlighted, click the Select button on the bottom of the remote control.

For more information, see "Using the remote control" on page 8.

### Controlling thermostats

The "Thermostats" itemallowsyoutocontrol two thermostats that are connected and configured in the Home Director system. When you select the Thermostats item from t the Home Director main screen, the "Thermostats" window displays.





A check mark next to a thermostat indicates that routines can make changes to the thermostat settings.



An "X" next to a thermostat indicates that routines <u>cannot</u> make

Note: For more information, see "Allowing or not allowing changes to thermostat settings from routines" on page 21.

#### Viewing thermostat settings

You can view the settings for a thermostat by doing the following:

changes to the thermostat settings.

- 1 From the Home Director main screen, move the on-screen highlight to one of the thermostatitems and click the Select button on the bottom of the remote control. The "Thermostats" window displays.
- 2 From the "Thermostats" window, move the on-screen highlight to the thermostatitem for which you want to view the available settings and click the Select button.
- 3 The selected thermostat screen displays. For example, if you select the "Downstairs" thermostat, the screen would look like this:



From the selected thermostat screen, you can:

- · View the "Now" temperature setting
- · Change the active setting (Wake, Sleep, or Away)
- · Change the set point temperature for each setting
- · Change the active mode (Heat, Cool, Auto, or Off)

Note: The mode is Off when the Heat, Cool, and Auto modes are not selected.

Turn the fan to Auto or On

- · Allow or not allow changes to the temperature settings from routines
- · Save changes (displays after you have made changes)
- · Cancel changes made before saving
- · Close the "Thermostats" window

#### Changing thermostat modes and temperature settings

From a thermostat item window, you can set a Wake, Sleep, or Away set point temperature and select the active mode (Heat, Cool, Auto, or Off). You can change the settings and mode directly from the thermostat window or from a routine. When you select the mode Auto, Home Director keeps the temperature within  $\pm 3$  degrees of the currently active set point. Home Director automatically turns on either the heating system or the cooling system, as appropriate.

To change the active thermostat setting:

- 1 From the Home Director main screen, move the on-screen highlight to one of the thermostatitems and click the Select button on the bottom of the remote control. The "Thermostats" window displays.
- 2 From the "Thermostats" window, move the on-screen highlight to the thermostat for which you want to change settings and click the Select button.
- 3 Fromthethermostatscreenthatdisplays, move the on-screen highlight to the setting (Wake, Sleep, or Away) that you want to activate.
- 4 Click the Select button. Agreen check mark displays behind the setting you select. The settings that are not active display an "X" behind them.
- 5 Move the on-screen highlight to "Save Changes" and click the Select button.

Thenew thermostat setting is saved and the "Thermostats" window displays. You can change the settings for the other thermostat or return to the Home Director main screen.

To change the active mode:

- 1 From the Home Director main screen, move the on-screen highlight to one of the thermostatitems and click the Select button on the bottom of the remote control. The "Thermostats" window displays.
- 2 From the "Thermostats" window, move the on-screen highlight to the thermostat for which you want to change the active mode and click the Select button.
- 3 Fromtheselectedthermostatscreenthatdisplays,movetheon-screenhighlighttothe mode (Heat, Cool, or Auto) that you want to activate.
- 4 Click the Select button. A green check mark displays behind the mode you select. The modes that are not active display an "X" behind them.

Note: The mode is Off when the Heat, Cool, and Auto modes are not selected.

5 Move the on-screen highlight to "Save Changes" and click the Select button.

The new active mode is saved and the "Thermostats" window displays. You can change the settings for the other thermostat or return to the Home Director main screen.

To change the thermostat temperature setting:

- 1 From the Home Director main screen, move the on-screen highlight to one of the thermostatitems and click the Select button on the bottom of the remote control. The "Thermostats" window displays.
- 2 From the "Thermostats" window, move the on-screen highlight to the thermostat for which you want to change settings and click the Select button.
- 3 Fromtheselectedthermostatscreenthatdisplays,movetheon-screenhighlighttothe temperature setting or set point (number) you want to change. You can change the temperature in any setting (Wake, Sleep, or Away).
- 4 Click the Select button to select the setting. A highlighted box displays around the selected temperature.
  - · Click the Select button again to increase the setting number.
  - Click the Resume button to decrease the setting number.
- 5 Move the on-screen highlight to "Save Changes" and click the Select button.

Thenewsettingissaved and the "Thermostats" window displays. You can change the settings for the other thermostat or return to the Home Director main screen.

L

L

#### Changing the fan settings

From the thermostat screen you can change the fan setting to Auto or On.

To change the fan setting:

- 1 From the Home Director main screen, move the on-screen highlight to one of the thermostatitems and click the Select button on the bottom of the remote control. The "Thermostats" window displays.
- 2 From the "Thermostats" window, move the on-screen highlight to the thermostat for which you want to change settings and click the Select button.
- 3 From these lected thermostats creen that displays, next to the "Fan" setting, move the on-screen highlight to "On" or "Auto" and click the Select button.
- 4 Move the on-screen highlight to "Save Changes" and click the Select button.

Thenewsettingissaved and the "Thermostats" window displays. You can change the settings for the other thermostat or return to the Home Director main screen.

#### Allowing or not allowing changes to thermostat settings from routines

Thermostat settings are often controlled by the different routines that have been created for you by your Integrator. These routines can make changes to the temperature set points and active mode, depending on the rules of the routine. However, there may be times when you do not want a routine to make changes to the thermostatsettings and you want to regulate the thermostatsmanually from the Home Director channel. In Home Director you can allow or not allow changes to thermostat settings from routines.

The following symbols display next to each thermostatin the "Thermostats" window and indicate the status of the "Allow Changes from Routines" option:



A check mark next to a thermostat indicates that routines can make changes to the thermostat settings.

An "X" next to a thermostat indicates that routines <u>cannot</u> make changes to the thermostat settings.

To allow or not allow changes to thermostat settings from routines:

- 1 From the Home Director main screen, move the on-screen highlight to one of the thermostatitems and click the Select button on the bottom of the remote control. The "Thermostats" window displays.
- 2 From the "Thermostats" window, move the on-screen highlight to the thermostat for which you want to change settings and click the Select button.

- 3 From the selected thermostat screen that displays, next to the "Allow Changes from Routines", do one of the following:
  - a To allow changes to the thermostat settings from routines, move the on-screen highlight to "Yes" and click the Select button.
  - b To not allow changes to the thermostat settings from routines, move the on-screen highlight to "No" and click the Select button.

Note: When "No" is selected, the settings remain as currently set until you either manually change them from the "Thermostats" window or select "Yes" next to "Allow Changes from Routines".

If you have routines that change the currently active set point (for example, the "Leave for the Day" routine switches the thermostats to the "Away" set point), the routines will still run but the set point used will not be changed by the routine until you select "Yes" next to Allow Changes from Routines".

4 Move the on-screen highlight to "Save Changes" and click the Select button.

The "Thermostats" window displays. You can change the settings for another thermostat or return to the Home Director main window.

Note: Before saving the changes you made on the selected thermostats screen, you cancancel the changes by moving the on-screen highlight to "Cancel" and clicking the Select button.

## Monitoring the security system

The "Security System" item on the Home Director main screen displays the current security system status. Toperform security system actions, follow the instructions that came with your system to change the settings from the security system keypad.

## **Controlling devices**

In the Home Director system, a device is a physical object (for example, a light or thermostat) that is installed in your home. Home Director can control a wide variety of devices if they are properly connected and configured. The "Devices" item allows you to control devices connected and configured in the Home Director system. When you select the Devices item from the Home Director main screen, the "Devices" window displays.





A check mark next to a device indicates that routines can make changes to the state of the device.

An "X" next to a device indicates that routines <u>cannot</u> make changes to the state of the device.

Note: For more information, see "Allowing or not allowing changes to devices from routines" on page 26.

The "Devices" window may not display all available devices. To see more device names, move the on-screen highlight to the up or down arrow the Select button on the bottom of the remote control.

Viewing device settings

You can view the settings for a device by doing the following:

- 1 From the Home Director main screen, move the on-screen highlight to the Devices item and click the Select button on the bottom of the remote control. The "Devices" window displays.
- 2 From the "Devices" window, move the on-screen highlight to the device for which you want to view the available settings and click the Select button.

The selected device screen displays. For example, if you select the "Family Room light" device, the screen would look like this:



From the selected device screen, you can:

- · Turn the device on or off
- · Change the brightness level for the device (for incandescent lights only)
- · Allow or not allow changes to the device from routines
- Close the device screen

#### Turning a device on or off

The "On" and "Off" options allow you to turn a device on or off. In some cases, the device may be turned on or off automatically as part of a routine. If you manually changesettingsforadevicethatiscurrentlycontrolledbyaroutine, the routine setting is overridden.

To turn a device on or off:

- 1 From the Home Director main screen, move the on-screen highlight to the Devices item and click the Select button on the bottom of the remote control. The "Devices" window displays.
- 2 From the "Devices" window, move the on-screen highlight to the device that you want to turn on or off and click the Select button.
- 3 From these lected devices creen that displays, move the on-screen highlight to choose "On" or "Off" and click the Select button.

The word "Sent" displays next to the "On" or "Off" setting for 5 seconds.

4 Move the on-screen highlight to "Close" and click the Select button.

The "Devices" window displays. You can change the settings for another device or return to the Home Director main screen.

Using the Bright option for a device (incandescent lights only)

The "Bright" optionallowsyoutospecifyabrightnesssettingforanincandescentlight. No special bulbs are required.

To change the Bright setting for a light:

- 1 From the Home Director main screen, move the on-screen highlight to the Devices item and click the Select button on the bottom of the remote control. The "Devices" window displays.
- 2 From the "Devices" window, move the on-screen highlight to the device for which you want to change the settings and click the Select button.

- 3 From the selected device screen that displays, move the on-screen highlight until the current Bright setting is outlined by the highlighting box.
- 4 Click the Select button to select the setting. The highlighting box is filled in.

5 Change the bright percentage:

- Click the Select button to increase the bright percentage.
- Click the Resume button on the top of the top of the remote control to decrease the bright percentage.

The word "Sent" displays next to the Bright setting for 5 seconds.

If the bright percentage is 100%, the light uses the maximum power of the bulb installed. If the bright percentage is 00%, the bulb is not lit. The Bright setting does not allow a bulb to use more power than its rating.

6 When you are finished making changes, move the on-screen highlight to "Close" and click the Select button.

The "Devices" window displays. You can change the settings for another device or return to the Home Director main screen.

#### Allowing or not allowing changes to devices from routines

You can set up a device to either allow or not allow changes to its state from routines. If a routine controls a device and you want to temporarily stop the routine from changing the device state, you can do that from the specific device screen on the Home Director channel.

The following symbols display next to each device in the "Devices" window and indicate the status of the "Allow Changes from Routines" option:





An "X" next to a device indicates that routines <u>cannot</u> make changes to the state of the device.

To allow or not allow changes to devices from routines:

- 1 From the Home Director main screen, move the on-screen highlight to the Devices item and click the Select button on the bottom of the remote control. The "Devices" window displays.
- 2 From the "Devices" window, move the on-screen highlight to the device for which you want to change settings, and click the Select button.
- 3 From the selected device screen that displays, next to the "Allow Changes from Routines", do one of the following:
  - a Toallow changes to the device state from routines, move the on-screen highlight to "Yes" and click the Select button.
  - b Tonotallowchangestothedevicestatefromroutines, move the on-screen highlight to "No" and click the Select button.

L

I

I

I

Note: When "No" is selected, the device state remains as currently set until you eithermanuallychangeitfrom the "Devices" window or select "Yes" next to "Allow Changes from Routines".

4 When you are finished making changes, move the on-screen highlight to "Close" and click the Select button.

The "Devices" window displays. You can change the settings for another device or return to the Home Director main screen.

## **Controlling routines**

In the Home Director system, a rule contains instructions for changing a device's state. A routine is a set of rules that is used to control devices. The "Routines" item allows youtostartorstopexisting home control routines and to change schedule information. When you select the Routines item from the Home Director main screen, the "Routines" window displays.





Acheckmarknext to a routine indicates that this routine is allowed to run from schedules.

An "X" next to a routine indicates that this routine is <u>not</u> allowed to run from schedules.



A "running man" icon next to a routine indicates that this routine is running.

Note: For more information, see "Allowing or not allowing routines to run from schedules" on page 31.

The "Routines" window may not display all available routines. To see more routine names, move the on-screen highlight to the up or down arrow the Select button on the bottom of the remote control.

#### Viewing routine settings

You can view the settings for a routine by doing the following:

- 1 From the Home Director main screen, move the on-screen highlight to the Routines item and click the Select button on the bottom of the remote control. The "Routines" window displays.
- 2 From the "Routines" window, move the on-screen highlight to the routine for which you want to view the available settings and click the Select button.

L

The selected routine screen displays. For example, if you select the "Come Home" routine, the screen looks like this:

17:00pm	MTWT	01/01 - 12/31
08:00pm		01/01-12/3
08.00pm		01/01 - 12/3
67 00 am	SMTWTES	01/01 - 12/01

From the selected routine screen, you can:

- View or change up to 4 schedules for the routine
- · Allow or not allow the routine to run from schedules
- Start or stop the routine
- Close the routine screen

#### Viewing a schedule for a routine

The "Schedule" option allows you to define up to 4 different schedules for a routine.

It may be useful to have different schedules for a particular routine. For example, if you leave your home at different times on different days of the week, you can create a "Leave for the Day" schedule for the different days of the week. Table 1 shows two sample schedules.

Start Time	Day of Week	Date Range	Description
08:30 am	MWF	01/01 - 12/31	Starts at 8:30 am every Monday, Wednesday, and Fridayfrom January 01 to December 31
09:30 am	TT	01/01 - 12/31	Starts at 9:30 am every Tuesday and Thursday from January 01 to December 31

Table 1: Sample schedules for a "Leave for the Day" routine

#### Changing a schedule

You can change the following schedule information for routines:

Time

I

- Variation in the start time ("Vary by")
- · Days of the week
- · Start and end dates

To change a schedule:

- 1 From the Home Director main screen, move the on-screen highlight to the Routines item and click the Select button on the bottom of the remote control. The "Routines" window displays.
- 2 From the "Routines" window, move the on-screen highlight to the routine for which you want to change a schedule and click the Select button.
- 3 From the selected routine screen that displays, click the number of the schedule you want to change.

The "Schedule" screen displays. For example, if you select Schedule 1 of the "Come Home" routine, the screen looks like this:



- 4 Select a time for the routine to start (you can choose only one of the following three options):
  - a To change the time, move the on-screen highlight until the hour, minute, second, or am/pm item is selected.
  - Click the Select button to increase the number or toggle between am and pm.
  - Click the Resume button to decrease the number.
  - b Tostarttheroutineautomaticallyatdawn,movetheon-screenhighlightto "Dawn" and click the Select button.
  - c To start the routine automatically at dusk, move the on-screen highlight to "Dusk" and click the Select button.
- 5 Select a variation in the start time for a routine.

Move the on-screen highlight into the "Vary by" area until the minute item is selected.

- Click the Select button to increase the number.
- Click the Resume button to decrease the number.

If you want a routine to always start at the exact scheduled time, set the "Vary by" minutes to 00.

If you specify a "Vary by" value of 10 minutes, the start time randomly varies up to 10 minutes before or after the scheduled start time. This feature is useful if you are going to be away from your home on vacation and you want it to appear that someone is home.

- 6 Select the days of the week on which the routine will run.
  - a Move the on-screen highlight until the day of the week you want is highlighted.
  - b Click the Select button to select the day.
  - c Repeat these steps until all of the days you want are selected.
  - A day that is selected displays this symbol behind it:
  - A day that is not selected displays this symbol behind it: X
- 7 Select the Start and End dates for the routine.

To change the date, move the on-screen highlight until the month or day item is selected.

- Click the Select button to increase the number.
- Click the Resume button to decrease the number.
- 8 Save the schedule:

L

- If you changed an existing schedule, move the on-screen highlight to "Save Changes" and click the Select button.
- If you did not make changes, move the on-screen highlight to "Close" and click the Select button on the remote control.
- 9 To activate a schedule so it can run, move the on-screen highlight to "Yes" next to "ScheduleActivated" and click the Select button. A schedule that is activated displays this symbol next to it:
- 10 To make a schedule not active, move the on-screen highlight to "No" next to "Schedule Activated" and click the Select button. A schedule that is not activated displays this symbol next to it:
- 11 If you want to return to the "Routines" screen without changing settings for a specific schedule, move the on-screen highlight to "Close" and click the Select button.

Allowing or not allowing routines to run from schedules

You can set up a routine to either allow or not allow the routine to run from schedules. If a schedule calls a routine to run and you want to temporarily stop the schedule from controlling the routine, you can do that from the specific routine screen on the Home Director channel.

The following symbols display next to each routine in the "Routines" window and indicate the status of the "Allow Routines to Run from Schedules" option:.

Acheckmarknexttoaroutineindicatesthatthisroutineisallowedto run from schedules.



An "X" next to a routine indicates that this routine is <u>not</u> allowed to run from schedules.

A "running man" icon next to a routine indicates that this routine is running.

To allow or not allow routines to run from schedules:

- 1 From the Home Director main screen, move the on-screen highlight to the Routines item and click the Select button on the bottom of the remote control. The "Routines" window displays.
- 2 From the "Routines" window, move the on-screen highlight to the routine for which you want to change the settings and click the Select button.
- 3 From the selected routine screen that displays, next to the "Allow Routines to Run from Schedules", do one of the following:
  - a To allow the routine to run from schedules, move the on-screen highlight to "Yes" and click the Select button.
  - b Tonotallowtheroutinetorunfromschedules, move the on-screen highlight to "No" and click the Select button.

Note: When "No" is selected, the routine state remains as currently set until you either manually change it from the "Routines" window or select "Yes" next to "Allow Routines to Run from Schedules".

4 When you are finished making changes, move the on-screen highlight to "Close" and click the Select button.

The "Routines" window displays. You can change the settings for another routine or return to the Home Director main screen.

#### Starting and stopping a routine

The "Start Routine Now" option allows you to immediately start a routine. If you choose this option, any schedule assigned to the routine will not be changed. When a routine is running, the "running man" icon displays to the left of the routine name on the "Routines" window.

The "StopRoutineNow" optionallowsyoutoimmediatelystoparoutine. Forexample, if your "Go to Bed" routine takes 20 minutes to turn off a series of lights around your house and you decide after starting the routine that you are not going to bed yet, stopping the routine will cancel the events that have not yet occurred in the routine. It will not undo or reverse events that have already occurred. You can restart the routine when you decide to go to bed.

To start or stop a routine:

- 1 From the Home Director main screen, move the on-screen highlight to the Routines item and click the Select button on the bottom of the remote control. The "Routines" window displays.
- 2 From the "Routines" window, move the on-screen highlight to the routine that you want to start or stop and click the Select button.
- 3 From the selected routine screen that displays, do the following:
  - a Tostartaroutine, move the on-screen highlight to "Start Routine Now" and click the Select button. The word "Started" displays to the right of the "Start Routine Now" setting for 5 seconds, the "running man" icon displays to the left, and the "Start Routine Now" setting changes to "Stop Routine Now".

I

L

I

I

L

- b To stop a routine that is running, move the on-screen highlight to "Stop Routine Now" and click the Select button. The word "Sent" displays next to the "Stop Routine Now" setting for 5 seconds.
- 4 Move the on-screen highlight to "Close" and click the Select button.

I

The "Routines" window displays. You can change the settings for another routine or return to the Home Director main screen.

## **Changing Home Director configuration settings**

The date and time configuration settings for the Home Director system display in the box in the lower left corner of the Home Director main screen. When you select the date and time box from the Home Director main screen, the "Configuration" window displays:



You can also turn on or off the sounds for the Home Director system from the "Configuration" window.

Changing the date and time

You can change the date and time from the Home Director "Configuration" window.

- 1 From the Home Director main screen, move the on-screen highlight to the Date and Time item and click the Select button on the bottom of the remote control. The "Configuration" window displays.
- 2 From the "Configuration" window, move the on-screen highlight until the "Date and Time" item is selected.
- 3 Click the Select button.

The "Set Date and Time" screen displays:



From the "Set Date and Time" screen, you can change the following settings:

- Month
- Day
- Year
- Hour

I

- Minute
- AM/PM
- 4 To change the date, move the on-screen highlight until the month, day, or year item is selected.
  - Click the Select button to increase the number.
  - Click the Resume button to decrease the number.
- 5 Tochangethetime, move the on-screen highlight until the hour, minute, or am/pmitem is selected.
  - Click the Select button to increase the number or toggle between am and pm.
  - Click the Resume button to decrease the number.
- 6 Highlight the "Save Changes" item and click the Select button.

Thenewsettingissavedandthe "Configuration" window displays. You can change the settings for sounds or return to the Home Director main screen.

Turning sounds on or off

You can specify whether or not you hear sounds from the Home Director software. To change the sound settings:

- 1 From the Home Director main screen, move the on-screen highlight to the Date and Time item and click the Select button on the bottom of the remote control. The "Configuration" window displays.
- 2 From the "Configuration" window, move the on-screen highlight until the "Sounds" item is selected.
- 3 Click the Select button.

The "Sounds" screen displays:



4 Highlight the "On" or "Off" item.

I

5 Click the Select button to change the setting.

Note: Sounds are on when you see the vor symbol behind the word "On".

Sounds are not on when you see the X symbol behind the word "On".

6 Highlight the "Save Changes" item and click the Select button.

Thenewsettingissavedandthe "Configuration" window displays. You can change the settings for Date and Time or return to the Home Director main screen.



## Diagnosing and recovering from problems

I

Thissectioncontainsinformationthatcanhelpyousolvecommonproblemsyoumight have with your Home Director system.

You should look through this chapter to find the problem description that matches the problem you are having. When you find the description, simply follow the steps to resolve the problem. Some problems have multiple steps. You should follow the steps until the problem is solved.

The information contained in this section is intended for several models of the Home Director product. The system you purchased may not have some of the hardware discussed in this section.

If your system did not come with the hardware described, some of the troubles hooting information may not apply. Follow the steps for the hardware and software that came with your system.

If you follow the steps in this section and the problem continues, or if you encounter a problem that is not listed in this section, you can still get help. See Chapter 5: "Getting Help" for more information.

### **Remote control**

If the problem is	Here's what to do
On-screen highlight on the Home Director channel does not move	<ol> <li>Make sure you are using the Home Director remote control on a television with an infrared target installed.</li> <li>"Wake up" the remote control by clicking the Resume button on the top of the remote. The remote control switches to power saving mode if it is not used for one minute or longer.</li> <li>Make sure you are pointing the remote control toward the infrared target. Note: For information on using the Home Director remote control, see "Using the remote control" on page 8.</li> <li>Make sure nothing is blocking the infrared target.</li> <li>Move the trackball slowly. The on-screen highlight will not move if you roll the trackball too fast.</li> <li>Checkthebatteryindicatorlight.Ifthebatterypowerislow,replacethebatteries.For more information, see "To change the remote control batteries:" on page 9.</li> <li>Make sure no fluorescent lights are shining directly on the infrared target. If so, the red light in the infrared target will blink even when the trackball is not moved. If fluorescent lights are shining on the infrared target:         <ul> <li>Turn off the fluorescent light (temporarily) to see if it is causing the problem b. Shield the infrared target from any direct fluorescent lights.</li> <li>If possible, relocate the fluorescent light.</li> </ul> </li> <li>Make sure that the infrared target will blink even when the trackball is not moved. If the infrared target target is not receiving reflected or direct sunlight. If so, the red light in the infrared target form any direct fluorescent lights.</li> <ul> <li>If possible, relocate the fluorescent light.</li> </ul> <li>Make sure that the infrared target is not receiving reflected or direct sunlight. If so, the red light in the infrared target is connected to the target wall outlet and that the infrared target is exposed to sunlight, either move or shield the target.</li> </ol>
	<ul> <li>a. If it is not connected, reconnect it to the "Target" connector.</li> <li>b. Make sure the green power indicator light is lit on the wall outlet. If the green power light is not lit, contact your Integrator.</li> <li>10 Test the on-screen highlight with another Home Director remote control, if available. If the on-screen highlight operates properly using the other remote, you may need to remote the green power of the green power light to prove the green power light operates properly using the other remote, you may need to remote the green power of the green power light operates properly using the other remote, you may need to remote the green power of the green power light operates properly using the other remote.</li> </ul>
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.

If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.

Table 2: Remote control problems

I

ŀ

# Troubleshooting

If the	problem	is
--------	---------	----

#### Here's what to do ...

**On-screen highlight on the Home Director** The trackball in the remote control may need cleaning. Use another Home Director channel moves only in one plane remotecontrol, if available. If the on-screen highlight functions normally when using (horizontally or vertically) or is sluggish anotherremote, follow these steps to clean the track ball in the non-working remote control. 1 Remove the batteries from the remote control by sliding the bottom of the remote back. 2 After you remove the batteries, turn the remote control over and hold it in one hand with the front of the remote control pointing away from you. 3 Take a ball point pen and insert the pen tip into the small indentation located in front of the trackball. 4 Turn the cover counter clockwise until it stops (about 1/2 inch). 5 Turn over the remote control into your other hand to remove the trackball. 6 Clean the trackball with a small amount of mild detergent in water and dry it with a lint free cloth. 7 Place the trackball on the cover so that it does not roll. 8 Clean the two plastic rollers inside the socket by gently rubbing each roller perpendicular to the roller with a cottons wab dipped in isopropylal cohol. Rotate the rollers to ensure that the entire roller is cleaned. Brush cotton swab in direction of arrows 9 Make sure that the inside of the socket is dry before replacing the trackball into the socket. 10 Place the cover on to the remote control so that the indentation is aligned with the notches. The cover should fit into place so that it is flush with the top of the remote control. 11 Take a ball point pen and insert the pen tip into the small indentation and turn clockwise (right) until it stops (about 1/2 inch). 12 Replace the batteries.

 $\checkmark$ 

If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.

Table 2: Remote control problems

If the problem is	Here's what to do
No picture appears on the Home Director channel, but a picture appears on all other channels	<ol> <li>Make sure the television is set to the Home Director channel.</li> <li>Make sure the coaxial cable is correctly attached to the television.</li> <li>If a VCR is installed between the television and the wall plate:         <ul> <li>Turn off the VCR and check the Home Director channel again.</li> <li>Connect the coaxial cable from the wall directly to the television and check the Home Director channel again.</li> </ul> </li> </ol>
A cable television channel appears on the Home Director channel	<ol> <li>Make sure the television is set to the Home Director channel.</li> <li>If a VCR is installed:         <ul> <li>Turn off the VCR and check the Home Director channel again.</li> <li>Connect the coaxial cable from the wall directly to the television and check the Home Director channel again.</li> </ul> </li> <li>Check with your local cable company to find out if a new cable channel has been added in your area. If a new cable channel has been added that has the same channel number as the Home Director channel, contact your Integrator to change the Home Director channel assignment or have your cable provider block that new channel for you so that the new channel will not override the Home Director channel.</li> </ol>
Herringbone pattern appears only on the Home Director channel	Contact your Integrator.
Herringbone pattern appears on many channels including the Home Director channel	Contact your Integrator.
No color on the Home Director channel	You may have chosen an incorrect cable standard setting in the setup screen on the television. Use the television setup screen to select another cable standard such as HRC or IRC, or contact your Integrator.
An error code (numbers) or an error message (text) is displayed on the screen	Write down the error code number, text, and any symptoms. Contact your Integrator.
HD channel and security camera channels appear to work but all other channels have a poor signal	Check the red "surge" light on the video distribution amplifier in the Home Network Connection Center. If it is lit, an electrical surge has damaged the video distribution amplifier and it must be replaced. Contact your Integrator.
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.

Table 3: Home Director channel problems

I

I

I

# Troubleshooting

## Uninterruptible power supply

If the problem is	Here's what to do
Beeping emanating from the Home Network Controller (regular intervals)	<ol> <li>If there has been a power outage to your home, the Uninterruptible Power Supply (UPS) will beep four times every 30 seconds until power is restored. When power is restored, the UPS will reset itself and the beeping will stop.</li> <li>If there has been no power outage to your home, contact your Integrator.</li> </ol>
Continuous beeping emanating from the Home Network Controller	The battery in the UPS needs to be replaced. Contact your Integrator.
A sustained tone emanating from the Home Network Controller	The power load for the UPS has been exceeded. Contract your Integrator.
Occasional beep emanates from the Home Network Controller	This indicates normal UPS functioning.
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.

#### Table 4: Uninterruptible power supply problems

L

I

I

I

### Home Network Connection Center

If the problem is	Here's what to do
A single telephone does not work	<ol> <li>Make sure the telephone is plugged into the telephone outlet.</li> <li>Check the wall plate for broken or damaged wires.</li> </ol>
	3 If you have a cordless telephone, disconnect the power cable for a few moments and then reconnect it.
	4 If available, take a working telephone from another area of the house and plugit into the telephone outlet in question and test it. If it works, replace your telephone.
	5 Open the Home Network Connection Center, locate the telephone cable from the wall plate in question. Make sure the cable is connected properly to the Residential Telcom Module.
	6 Connect a known working telephone directly into the Residential Telcom Module outlet for the wall plate in question.
	7 If the telephone does not work properly, the module may need to be replaced. Contact your Integrator for replacement of the module. Until a replacement part is obtained, move the telephone cable to a working connector on the module.
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.

Table 5: Home Network Connection Center problems

If the problem is	Here's what to do		
No telephones work	<ol> <li>If your home has a security system:         <ul> <li>Open the Home Network Connection Center, disconnect the telephone (RJ-11)</li> <li>cable that is plugged into the RJ-31X connector in the Residential Telcom</li> <li>Module.</li> </ul> </li> </ol>		
	<ul> <li>b. Replace the RJ-11 cable with the shorting plug that came with the module.</li> <li>c. If the phones begin to work, call your Integrator. There may be problems with the security system.</li> </ul>		
	<ul> <li>2 If your home does not have a security system:</li> <li>a. Contact the phone company to find the location of the telephone company interface box on the outside of your house.</li> </ul>		
	<ul> <li>b. Check to see if the interface box has an RJ-11 (telephone jack) connector. If it does, then connect a telephone and check for dial tone.</li> <li>c. If the interface box on your home does not have an RJ-11 interface, contact your local telephone company.</li> </ul>		
	<ol> <li>If the telephone company informs you that there is a dial tone to your house and your phone still does not work, contact your Integrator. Tell the Integrator that the telephone company has verified a dial tone to your house.</li> </ol>		
	<ol> <li>4 Open the Home Network Connection Center and check to see if the red LED on the Residential Telcom Module is lit. If the red LED is lit, contact your Integrator.</li> <li>5 Verify that the telephone service cable is connected properly to the Residential Telcom Module. Disconnect and reconnect each cable.</li> </ol>		
DBS channels do not appear on the television	<ol> <li>Make sure there is a broadcast signal on the channel you have selected.</li> <li>Connect a television directly to the DBS receiver.</li> <li>If there is still no picture, check your DBS remote for a video/TV selection and verify that it is set to "TV". If your DBS remote does not have a video/TV selection, contact the DBS provider.</li> <li>If there is a picture when connecting a TV directly to the receiver, then contact your lategrator</li> </ol>		
Cable or UHF/VHF channels do not appear on the television	<ol> <li>Make sure there is a broadcast signal on the channel you have selected.</li> <li>If you have a cable box or VCR, make sure the cables are properly connected. (For instructions, check the owner's manual for your cable box or VCR).</li> </ol>		
Camera option output does not appear on the television	Make sure you have selected the proper channel for the camera.		
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.		

Table 5: Home Network Connection Center problems

I

# Troubleshooting

Devices	
Here's what to do	
<ol> <li>Turn on the device manually.</li> <li>Turn on and off the device using the Home Director channel.</li> <li>Make sure the power switch on the device (if applicable) is set to the "on" position.</li> <li>Make sure the safety switch is not pulled out on the light switch.</li> <li>If the device is a light, make sure the bulb is still good. If it is not, replace the bulb.</li> <li>Make sure the device is plugged into an outlet that has power.</li> <li>Make sure that "Yes" is selected next to "Allow Changes from Routines" on the device screen on the Home Director channel.</li> <li>If the device is controlled by a scheduled routine, check the schedule for the routine on the Home Director channel to make sure the routine's start and end dates are correct.</li> </ol>	
<ol> <li>Makesurethedeviceisstillpluggedinandthatthepowerswitch(ifapplicable)isstill set to the "on" position.</li> <li>If the device is a light, make sure the bulb is still good. If it is not, replace the bulb</li> </ol>	
<ol> <li>Make sure you are using an "incandescent" type light. The Home Director software is not designed to dim any other type of light, for example, fluorescent.</li> <li>Contact your Integrator to check if the minimal dim level for the switch is set too high.</li> </ol>	
If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.	

#### Table 6: Problems with devices

l

### Routines

If the problem is	Here's what to do	
A routine is scheduled but does not start on the correct date or time.	Make sure the current date and time settings are correct for your location by checking the "Configuration" window on the Home Director channel.	
A routine is scheduled to start at "Dawn" and/or "Dusk" and does not begin and end on time	Make sure the current date and time settings are correct for your location by checking the "Configuration" window on the Home Director channel.	
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.	

Table 7: Problems with routines

### **Ethernet Network**

If the problem is	Here's what to do	
A computer plugged into the Ethernet home network does not connect	<ol> <li>Make sure the computer cables are properly connected.</li> <li>Make sure the hardware and software are configured properly and for the 10BaseT standard.</li> </ol>	
	3 Check to see if the green light is lit on the Computer Networking Module inside the Home Network Connection Center.	
	4 Move the computer to another Ethernet connection in the house and try to connect again.	
	5 To obtain support information, refer to the documentation that came with your computer.	
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.	

#### **Table 8: Problems with Ethernet connections**

I

I

## Thermostat wall display

If the problem is	Here's what to do	
No heat or air conditioning	1 Check the wall display(s) to see if the temperature is displayed. Contact your Integrator if no temperature is displayed.	
Heat or air conditioning system runs constantly	2 If the temperature is displayed, make sure it is set to the temperature you specified. The temperature can be set from the wall display or the Home Director channel.	
Manual control of thermostats but Home Director routines cannot control thermostats	Make sure that "Yes" is selected next to "Allow Changes from Routines" on the thermostat screen of the Home Director channel.	
Thermostat wall display is blank (no temperature displays)	<ol> <li>Check if the power is out.</li> <li>Make sure that the face plate of the thermostat wall display is connected properly.</li> </ol>	
"CF" displays on the thermostat wall display	This indicates a "communication failure" (CF). Call your Integrator for the possible replacement of a bad thermostat wall display.	
$\checkmark$	If any of these problems continue after you take the actions listed, see "Obtaining service and support" on page 49.	

Table 9: Problems with thermostat wall displays



## Obtaining service and support

#### **Printed documentation**

Chapter 4: "Troubleshooting" contains helpful information you can use to solve common problems you may have with your Home Director system.

Many of the components in the Home Director system require professional service. Somefailuresrequirelicensedtradespecialists(likeelectricians)tocompleterepairsor replacements. YourIBMAuthorized Home SystemIntegrator can help you arrange for these types of warranty or fee-service repairs.

#### IBM Authorized Home System Integrator

The IBM Authorized Home System Integrator (your installer) is the person or company that installed the Home Director productiny our home. You should contact your installer if you have taken the actions listed in the printed documentation and the problem still exists.

Authorized installers have detailed information and contacts which they can use to quickly resolve problems you may have with your system. Your installer was instructed to include the name and telephone number of their company in the "Appendix" of this book. Refer to that section for information on contacting the installer.

#### IBM

You can contact IBM if your installer is no longer available and you need another local service contact or if you are having an emergency and cannot contact the installer.

Before you call, please have the following information available. This will provide the IBM technical support representative with valuable information that will assist them when handling your call.

- Name:
- Address:
- Telephone number:
- Machine and model type: (see "Important Information" on page 53)
- Machine Serial number: (see "Important Information" on page 53)
- Installer name:
- Date of purchase (closing date):

Support Center number availability.

The IBM Home Director Professional support center is available 24 hours a day, 365 days a year (response times vary). In the United States and Canada, call 1-800-426-7149.

In all other countries, contact your IBM reseller or IBM marketing representative for telephone numbers, services, and hours of operation if applicable.





# **Appendix A: Installation Information**

## **Important Information**

I

YourIntegratorshouldrecordtheimportantinstallationinformationonthispage.Refer to this information when you need service and support from your Integrator or IBM. Thisinformationmayhelpreduce the amount of time required for these rvices pecialist to diagnose problems you may have with your system.

Date of Installation / Warranty Start Date:

The date of installation and orientation is the date on which your warranty period begins. Your signature and the signature of your Integrator should appear on the lines following the date. You may want to attach your sales invoice to this page for your records.

/		/
Month	Day	Year
	,	
	/	
Homeowner signature		Homeowner name (printed)
	/	
Integrator signature		Integrator name (printed)
		-
Integrator company name		
integrator company name.		

Integrator certification number (from IBM):

HNCC model number:

HNCC machine serial number:

Modules installed:

HNC machine type and model number:

HNC machine serial number:

## Index

#### **Numerics**

4 button wall controller switches 13

### В

batteries, changing in remote control 9 brightness option for lights 25

### С

cleaning trackball in remote control 10 configuration settings date and time, changing 34 sounds, turning on and off 35 controller switches (4 button) 13 conventions used in this book vii

### D

date, changing 34 devices, controlling allowing routines to change settings 26 dimming lights with Home Director channel 25 turning on or off with Home Director channel 25 viewing settings 24 diagnosing problems, *See* troubleshooting dimmer switches, using 12 dimming lights, *See* lights, dimming

### F

fan mode changing from Home Director channel 21 changing from thermostat wall display 11 FCC notice (Class B digital device) v

#### Н

hardware Home Network Connection Center cabinet 7 Home Network Controller cabinet 7 remote control batteries, changing 9 cleaning trackball 10 power save mode 9 system components 7 thermostat wall display 11 help, getting 49 highlight, using on-screen 17 Home Director channel configuration settings 34 controlling devices 24 controlling routines 28 controlling thermostats 18 security system monitoring 23 selecting items 17 Home System Integrator information 53

### I

IBM Program License Agreement limitation of liability 4 warranty for programs 3 infrared sender (remote control) 8 integrator information 53

### L

license agreement limitation of liability 4 warranty for programs 3 lights, dimming manually 12 using Home Director channel 25 *See also* devices, controlling

#### Μ

modes, changing fan 11 thermostat 11

### 0

on-screen highlight, using 17

### Ρ

power save mode in remote control 9 problem solving, *See* troubleshooting

#### R

remote control batteries, changing 9 buttons **Resume 8** Select 8 cleaning trackball 10 infrared sender 8 power save mode 9 selecting items on Home Director channel 17 trackball 8 using 8 **Resume button (remote control) 8** routines, controlling allowing to run from schedules 31 changing schedules 29 starting/stopping 32 viewing settings 28

### S

safety information vi safety switch (on dimmer switch) 12 schedules for routines, changing 29 securitysystem,monitoringwithHomeDirectorchannel23 Select button (remote control) 8 service and support 49 software license agreement limitation of liability 4 warranty for programs 3 solving problems, *See* troubleshooting sounds, turning on and off 35 switches 4 button wall controller 13 dimmer 12

#### Т

temperature changing from wall display 11 setting with Home Director 20 thermostat settings allowing changes from routines 21 changing from Home Director channel 19

changing from wall display 11 fan, changing settings 11, 21 viewing on Home Director channel 18 thermostat wall display changing fan mode 11 changing mode 11 raising or lowering temperature 11 time, changing 34 trackball (remote control) cleaning 10 using 8, 9 troubleshooting devices controlleddevicedoesnotturnonorofffromroutine 45 controlled device turns on or off unexpectedly 45 controlled light will not dim 45 two controlled devices turn off when only one is scheduled 45 Ethernet network computerpluggedintotheEthernethomenetwork does not connect 46 Home Director channel cable television channel appears 42 error code (numbers) or an error message (text) is displayed on the screen 42 herringbone pattern appears 42 herringbone pattern appears on many channels 42 no color 42 no picture appears 42 poor signals on TV channels 42 Home Network Connection Center cable or UHF/VHF channels do not appear on the television 44 camera option output does not appear on the television 44 DBS channels do not appear on the television 44 no telephones work 44 single telephone does not work 43 overview 39 remote control cleaning trackball 41 on-screen highlight does not move 40 on-screen highlight only moves in one plane 41 routines dawn or dusk routine does not begin and end on time 45 routineisscheduledbutdoesnotstartonthecorrect date or time 45 thermostat wall display CF displays 46

heat or air conditioning system runs constantly 46 manual control of thermostats but Home Director cannot control thermostats 46 no heat or air conditioning 46 no temperature displays 46

uninterruptible power supply

beeping emanating from Home Network Controller 42, 43 continuous beeping emanating from Home Network Controller 43 occasional beeping emanating from Home Network Controller 43 sustained tone emanating from Home Network Controller 43

#### W

waking up remote control (power save mode) 9 wall thermostat display, *See* thermostat wall display