

MODEL HA07 - MASTER CONTROLLER INSTRUCTIONS

Thank you for purchasing Intermatic's Home Settings devices. With these products you can reliably and remotely control lighting and appliances. The outstanding features of the Home Settings program include:

- Feedback that will allow you to see whether your device has received the ON/OFF/DIM signal.
- Ease of installation
- Manual override
- RF signal reliability each Home Settings product has a special repeater feature that virtually guarantees that RF signals are received.

The HA07 Controller also includes the following features:

- 12 Channels each channel can control up to 16 devices to create scenes or timed events.
- Astronomic Feature this option allows your time settings to match the daily changes in sunrise and/or sunset. Set it once and never have to set it again for these types of time changes.
- Wall mountable or place on a tabletop.
- Daylight Saving Time this option automatically adjusts your timer for daylight saving time.
- Programming flexibility timing options can be every day of the week, Mon- Fri, Sat-Sun, or individual days.
- ALL ON/ALL OFF Feature Turn all devices ON or OFF with the push of one button.
- If required, more than one controller can be used for the same system.
- Timed control

Z-Wave[™] Introduction

The HA07 Master Remote Controller is a Z-Wave[™] enabled device and is fully compatible with any Home Settings network and any Z-Wave[™] enabled network. Z-Wave[™] enabled devices displaying the Z-Wave[™] logo can also be used with Home Settings modules and controllers regardless of the manufacturer, and Home Settings modules and controllers can also be used in other manufacturer's Z-Wave[™] enabled networks. Each module in a Home Settings network is designed to act as a repeater. Repeaters can re-transmit the RF signal to ensure that the signal is received by its intended destination by routing the signal around obstacles and radio dead spots.

Table of Contents

Glossary of Terms	4
Installing Batteries	6
Module Installation and Set-up Recommendations	
Programming Instructions	8
Setting the Clock	8
Setting the Calendar	9
Setting Daylight Saving Time & Zone	11
Setting Astronomic Function	13
Creating a Network	14
INCLUDE Modules to a Network	14
Associating Modules to Channels	
EXCLUDE from Network	
EXCLUDE from Channel	
Remote ON/OFF/DIM Operation	19
Adding Modules to ALL ON/ALL OFF Feature	

INCLUDE Modules to ALL ON/ALL OFF Feature	20
EXCLUDE Modules to ALL ON/ALL OFF Feature	22
Programming the Controller	23
Automatic, Automatic Random, and Manual Mode	27
Additional Features	28
Controller Replication	28
Replicating the Network and Channel Settings	28
Replicating the Network only	30
Resetting the Controller	31
Resetting the NETWORK only	31
Resetting the CHANNELS only	31
Resetting the NETWORK and CHANNELS	31
Troubleshooting	32
Federal Communications Commission Statement	34
Specification Information	34
Warranty Information	35

Master Remote Controller



Fig 1. LCD display and button configuration.

Glossary of Terms

<u>Astronomic Function</u> – Allows a device to follow sunrise and sunset times. The unit will automatically adjust as daylight time increases or decreases without the need to be reprogrammed.

<u>Channel</u> – A channel will control up to 16 modules, allowing them to be programmed to turn on/off with the same time settings. HA07 has 12 channels.

<u>Device</u> – Any item that is connected to a module (for example, lamps).

<u>Event</u> - A program in the controller that will instruct the controller to control various modules at a set day and time. The HA07 can accommodate up to 28 events.

<u>Module</u> – Any Intermatic Home Settings product that is controlled with a remote controller.

<u>Network</u> – All Intermatic Home Settings devices controlled by the Master Controller and duplicate remote controls operating on the same system. Each network has its own unique identification code so that no one else can control the system.

<u>Primary Controller</u> – The first controller used to set up your modules and network.

NOTE: Only the Primary Controller can be used to include or delete modules from a network.

<u>Scene</u> – Lighting modules assigned to the various channels can be set at different levels, thus creating desired light levels throughout your house called scenes. Scenes can be set during the "Associating Modules To Channels" step (see page 16) by choosing ON, OFF and/or DIM settings.

<u>Secondary Controller</u> – A controller containing network information about other modules within the network, and is created the primary controller. Secondary controllers cannot include or delete modules to the network.

Battery Installation

- Open the battery compartment door located on the back of the remote control by pressing down on the battery compartment tab and pulling the door outward.
- Insert 4 size "AA" alkaline batteries (not included), placing the batteries as shown in the battery compartment. (See Fig 2)
- 3. Replace the battery compartment door by first inserting the 2 tabs at the bottom of the door, then pressing the door in until the door clicks shut.



Fig 2. Battery compartment

Module Installation and Set-Up Recommendations

- 1. Modules should be plugged-in or hardwired into the location where they will be used.
- 2. For best results, do not move or relocate modules after they have been included into the network. If you wish to re-locate or move a module from a particular location, first delete it from the network, then include it back to the network after you have re-located it.
- Devices should be plugged into modules before adding modules to the network. Devices (for example, lamps) should be turned to the ON position.

- 4. Controllers must be brought within 6 ft. of modules during set-up. This is because during set-up, the controller communicates with the modules using low radio transmission power. This helps provide additional security when setting up your network.
- 5. HA06 Dimmer Switches have a 40-Watt minimum lamp requirement.

Programming Instructions Setting the CLOCK

1. (See Fig 3a) Press MODE until CLK mode is shown.



 (See Fig 3b) Press ENTER and the hour will flash. Press + or - to set the hour. Press ENTER to accept the hour.



 (See Fig 3c) The minutes will flash. Press + or - to set minutes. Press ENTER to accept the minutes.



Setting the CALENDAR

NOTE: The day of the week will be automatically calculated when the CALENDAR setting is completed.

- 1. (See Fig 4a) Press MODE until the CAL mode is shown.
- 2. (See Fig 4b) Press + or to set the month. Press ENTER to accept the changes.
- 3. (See Fig 4c) The day of the month will flash. Press + or
 - to set the day. Press ENTER to accept the changes.
- 4. (See Fig 4d) The year will flash. Press + or to set the year. Press ENTER to accept the year.

Setting the CALENDAR (continued)



Fig 4a – CAL mode Fig

Fig 4b - Set Month





Fig 4c – Set Day Fig 4d – Set Year

Setting Daylight Saving Time (dST) and Zone

- 1. (See Fig 5a) Press MODE until the SETUP mode is shown.
- The controller is programmed to automatically adjust for daylight saving time (dST). If you want to keep this setting, press ENTER to go to ZONE. Skip to step 4.
- If you do not want dST, press + or . The display will read OFF. (See Fig 5b) (Pressing the + or – button a second time will toggle the dST selection back to "AUTO".) Press ENTER to go to ZONE.
- (See Fig 5c) ZONE CENTER will flash. Press + button and select the proper zone for your location. Press ENTER when your zone is set. Zones are divided between North, Central and South (See Fig 5d).



Setting Daylight Saving Time (dST) and Zone (cont'd)



Fig 5c – Press ENTER to accept zone setting.



Fig 5d – Zone Map

Setting Astronomic Function

NOTE: If you do not want to use the Astronomic function, you can bypass SETUP mode by pressing the MODE button until program (PGM) mode is displayed. (See Fig. 6)

- 1. The default SUNUP times for this zone will be flashing. Press ENTER to accept.
- 2. If the time is not correct, or if you would like to customize the SUNUP time, press + or to enter the desired time and press ENTER.
- 3. (See Fig 7) SUNSET times for this zone will be flashing. Press ENTER to accept.
- 4. If the time is not correct, or to customize this time, press + or to enter the desired time and press ENTER.



Fig 6 – SUNUP default time may be different than shown above.

Setting Astronomic Function (continued)



Fig 7 – SUNSET default time may be different than shown above. Press ENTER to accept the default time.

Creating a Network

NOTE: Creating a network refers to assigning modules to the master controller. All modules must be assigned to the master controller before any programming or remote control functions can be accomplished.

NOTE: Devices should be plugged into modules before adding modules to the network. Devices (for example, lamps) should be turned to the ON position.

INCLUDE Modules to a Network

 (See Fig 8a) Press and release the INCLUDE button. The INCL icon and TRANSMITTING message will begin to flash, indicating that the controller is ready to include modules to the system. (If INCL and TRANSMITTING stop flashing, the controller has "timed out". The INCLUDE button must be pressed again).

INCLUDE Modules to a Network (continued)

 (See Fig 8b) Press and release the PROGRAM button on the module. If successful, the INCL icon will stop flashing and the word SUCCESSFUL will show for 2 seconds. If NOT SUCCESSFUL appears on the screen, it will be necessary to repeat this step until SUCCESSFUL appears.

Repeat steps 1 and 2 for each module you wish to add to the network.





Fig 8b – Press the PROGRAM button

Associating Modules to Channels

- (See Fig 9a) On the remote controller, *simultaneously* press and hold the channel ON and OFF buttons of the desired channel. LEARN will be displayed. (*Note: Learning mode will time out after 10 seconds. If this happens, ON and OFF buttons have to be pressed again*). Release the ON and OFF buttons after "LEARN" appears in the display.
- 2. (See Fig 9b) Press and hold the INCLUDE button. INCL will appear on the screen.
- 3. (See Fig 9c) CONTINUTE TO HOLD THE INCLUDE BUTTON. You may now set a scene for your channel by pressing the PROGRAM button on the module until you reach your desired light-level setting. Possible

settings are FULL ON, FULL OFF or DIM LEVEL. Setting different light levels for different modules allows you to create "scenes" for each channel. NOTE: Only HA03 Lamp Module and HA06 In-Wall Switch/Dimmer have dimming capabilities.

- Release the INCLUDE button on the remote controller. After you release the INCLUDE button, the controller will store the current light-level and SUCCESSFUL will display on the controller for 2 seconds and the module LED will flash for 2 seconds.
- 5. To add additional devices, repeat steps 1 4.



Fig 9a – Press and hold the channel ON and OFF buttons. Release buttons when "LEARN" is shown in the display.





Fig 9c – Set the desired light level by pressing the PROGRAM button on the module. Release the INCLUDE button on the controller when the light level is set.

EXCLUDE from the Network

(See Fig 10a and 10b) Follow the same procedure as <u>Creating a Network</u> (see page 14) except press the DELETE button instead of the INCLUDE button.





Fig 10b – Press the PROGRAM button

EXCLUDE from a Channel

(See Fig 11a – 11c) Follow the same procedure as <u>Associating Modules to Channels</u> (see page 16) except press the DELETE button instead of the INCLUDE button.



Page 18 of 35

EXCLUDE from a Channel (continued)



Fig 11c - Press the PROGRAM button

Remote ON, OFF, DIM Operation

ON - Press and release the ON button for the assigned channel. OFF - Press and release the OFF button for the assigned channel. DIM UP - press and hold the ON button. DIM DOWN - press and hold the OFF button.



Adding Modules to ALL ON/ALL OFF Feature

The HA07 Master Controller includes an ALL ON/ALL OFF feature that allows all lighting modules in the network to be turned ON or OFF at the same time. As modules are added to the network, only the following modules are automatically added to the ALL ON/ALL OFF feature:

- HA03 Lamp Module
- HA05 Screw-In Lamp Module
- HA06 In-Wall Switch/Dimmer
- Other Z-Wave[™] compatible lamp modules and dimmers If you would like to add additional modules to the ALL ON/ALL OFF feature that are not listed above, please do the following:

INCLUDE Modules to the ALL ON/ALL OFF feature:

- (See Fig 13a) Press and hold ALL ON and ALL OFF buttons at the same time (about 4 seconds) until the display reads ALLSET. (NOTE: ALLSET will time out after 10 seconds. If this happens, repeat step 1.)
- 2. (See Fig 13b) Press and hold INCLUDE on the controller.
- 3. (See Fig 13c) Press and release the PROGRAM button on the Home Settings module.
- 4. SUCCESSFUL should be indicated on the display. If not successful, repeat steps 1-3.

INCLUDE Modules to the ALL ON/ALL OFF feature:





Fig 13a – Press and hold the ALL ON and ALL OFF buttons until ALLSET appears.





Fig 13c - Press the PROGRAM button

EXCLUDE Modules from the ALL ON/ALL OFF Feature

1. (See Fig 13d) Follow the same steps as above, except in step 2, hold the DELETE button.



Programming the Controller

To set a programmed event, you will need to set a "day group" and the event execution time. A "day group" can represent all 7 days of the week (SUN through MON), weekdays (MON through FRI), weekends (SAT and SUN), or individual days of the week.

Set the DAY GROUP and the event execution time:

- 1. (See Fig 14a on page 24) Press the MODE button until PGM is displayed.
- (See Fig 14b on page 24) Press the + button and the days of the week will flash. Press and release the + button until the day or series of days that you want the timer to turn ON

is selected, OR if you wish to use the Astronomic feature, press and release the + button until SUNUP or SNST appears on the screen. Press ENTER to accept the entry.

- (NOTE: If you have selected the Astronomic feature, steps 3 and 4 will be automatically bypassed) (See Fig 14c on page 24) The hour will flash. Use + or – buttons to select the hour that you want to turn the lights on. Press ENTER to accept the entry.
- (Fig 14d on page 24) Minutes will now flash. Press the + or – buttons to set the minutes of the on time. Press ENTER to accept the entry.

Programming the Controller (continued)



Fig 14a – Press the MODE button Fig 14b – Press the + button





Fig 14c - Select the hour

Fig 14d – Select the minutes

Programming the Controller (continued)

After setting the day group and execution time, you will need to choose which channels you want to control, and what you want those channels to execute. The master controller can send commands to modules to turn ON to full brightness, turn OFF, turn ON to a preprogrammed brightness level (other than full ON), or turn a SCENE ON.

Setting the Channels to Control, and Setting the Lighting Effect (The Channel numbers and Dimmer Bars should already be flashing.)

 Press the Channel ON button of the channel that you wish to program. (NOTE: For Channels 7-12, press the SHIFT button). You may select more than one channel. (See Fig 14e on page 26) Set the lighting level by pressing and holding the ALL OFF or ALL ON buttons until the bars indicate the approximate desired light level.

(See Fig 14f on page 26) If you would like to control SCENES (the light levels that were established when you originally set up the modules), press and release ALL ON. Four dimming bars are displayed with spaces in between each. Pressing ALL ON a second time will selections.

7. (See Fig 14g on page 26) Press ENTER to accept your selections. Pressing ENTER will increase the event number. Up to 28 events can be programmed into the controller.







Fig 14f – Press and release ALL Fig 14g – Press ENTER to accept ON to use SCENES (preset light settings and step to the next event levels)

CONGRATULATIONS! You have completed the programming of your HA07 Master Controller.

Page 26 of 35

OPERATING MODES AUTOMATIC, AUTOMATIC RANDOM, AND MANUAL MODE

(See Fig 15) When you have completed your PROGRAM settings, press MODE.



Fig 15 – Press the MODE button to select operation method

AUTOMATIC – the programs that you have set will automatically run, as you have set them. The display indicator will show "AUTO". AUTOMATIC RANDOM - the program events that you have set will execute ±15 minutes from your programmed EVENT times. This is a security feature that gives your house a more "lived-in" look. The display indicator will show "AUTORAND".

MANUAL – devices will only turn ON or OFF manually by using the Channel ON and Channel OFF buttons, and will not run the programmed event schedules. The display indicator will show "MAN".

Additional Features

The HA07 Master Controller allows you to create two different types of copies of the primary remote controller: - Replicating both Network and Channel settings will copy all network information and scene information for each channel. - Replicating the network only will copy network information only. This gives you ability to customize the secondary controller by associating different modules to each channel.

Controller Replication

Each network can have only 1 primary controller. However, you may wish to have the use of more than one controller for your system. To replicate (copy) the primary controller:

Replicating the Network and Channel Settings

(See Fig 16a & 16b) On your Primary Controller:

- 1. Press and hold INCLUDE for 5 seconds. COPY will flash. Release the INCLUDE button.
- 2. Press and release Channel 1 **ON**/DIM on the **Primary Controller**. The display will show "TA" which means "Transmit All information".

(See Fig 16c & 16d) On the **Secondary controller**:

- 3. Press and Hold INCLUDE for 5 seconds. COPY will flash. Release the INCLUDE button.
- Press and release Channel 1 OFF/DIM on the Secondary Controller. The display will show "RA" which means "Receive All information".

Replicating the Network and Channel Settings (cont'd)

(Note: If the secondary controller is Home Settings Model HA09 Handy Remote Controller, follow the same procedure as the HA07 Master Remote. Instead of seeing the word "COPY", the 2 LEDs on the HA09 will flash simultaneously.)

The controllers will automatically synchronize with each other and the word "SUCCESSFUL" will flash for 2 seconds on the display (for HA09 Handy Controller, success is indicated with a solid green LED for 2 seconds). If not successful, the words "NOT SUCCESSFUL" will be displayed for 2 seconds (for HA09 Handy Controller, the red and green LED's will flash for 2 seconds).



Fig 16a – Press and hold the INCLUDE button on the **Primary Controller**. "Copy" will be shown in the LCD display. Release the INCLUDE button.



Fig 16b – Press and release the Channel 1 ON/DIM button on the Primary Controller. "TA" which stands for "Transmit ALL data" will be shown next to "Copy".

Replicating the Network and Channel Settings (cont'd)

a) COPI

Fig 16c – Press and hold the INCLUDE button on the Secondary Controller. "Copy" will be shown in the LCD display. Release the INCLUDE button.



Fig 16d – Press and release the Channel 1 OFF/DIM button on the **Secondary Controller**. "RA" which stands for "Receive ALL data" will be shown next to "Copy".

Replicating the Network only

Follow the same procedure as **Replicating the Network and Channel Settings**, except in step 2, press Channel 2 ON/DIM, and in step 4, press Channel 2 OFF/DIM.

Notes on Primary and Secondary Controllers:

- 1. You cannot include or delete modules to or from the network using a secondary controller.
- Any time a change is made to the Primary Controller, the secondary controllers should be reprogrammed or updated using the Controller Replication process (see page 28).
- The maximum number of Z-Wave devices per HA07 Master Controller, including other controllers, is 192 devices.

Resetting the Controller

If needed, you can reset the NETWORK and CHANNEL SETTINGS individually or both together. NOTE: When resetting a controller, for best results, each module within the system should be individually reset also.

Resetting the NETWORK only

- Press and hold INCLUDE and DELETE buttons at the same time for 10 seconds. The display will read, "RESET".
- 2. Hold the Channel 3 ON/DIM and OFF/DIM buttons until the display reads, "NETWRK CLEAR".

Resetting CHANNELS only

Follow the same procedure as **Resetting the Network**, except press Channel 2 ON/DIM and OFF/DIM buttons in step 2. The display will read, "CHAN CLEAR".

Resetting NETWORK and CHANNELS

This reset function will completely reset the CLOCK, PROGRAMMED EVENTS, CHANNEL, and NETWORK SETTINGS on the controller. Follow the same procedure as **Resetting the Network**, except press Channel 1 ON/DIM and OFF/DIM buttons in step 2. The display will read, "ALL CLEAR".

Troubleshooting

Problem:

 Every time I try to INCLUDE or DELETE modules to my network, I keep getting errors (red LED flashes)

• After I perform a controller replication, neither controller controls anything at all.

Solution:

- The controller might be a Secondary Controller. Only a Primary Controller may be used to INCLUDE or DELETE modules into or from a network. Use the Primary Controller to INCLUDE or DELETE.
- The module might be part of a different network. Reset the module by pressing and releasing DELETE on the primary controller, then push the program button on the module. Now you may INCLUDE the module using the Primary Controller. (See page 14).
- You have copied from the wrong controller and overwritten your primary controller.

Troubleshooting

Problem:

 I am trying to turn on a module associated to channel 1, but it will not turn on.

• My programmed events will not automatically execute.

Solution:

- Check to be sure there is power supplied to the module.
- Check to be sure that the lightbulb is not bad.
- The module might be associated as a 'FULL OFF' lightlevel. Re-associate the module (see page 16) as a 'FULL ON' or as a dimmed light level.
- After programming your events, press MODE until the LCD display indicates 'AUTO' or 'AUTORAND' mode.

Federal Communications Commission Statement

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

NOTE: 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 installation. 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 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 or device.
- -- 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 the dealer or an experienced radio/TV technician for help. WARNING!

Changes or modifications not expressly approved by Intermatic Inc. could void the user's authority to operate the equipment.

Model HA07 - Master Remote Controller - Specifications

Indoor use only Suitable for use in dry locations Operating Temperature Range: 0°C to 40°C RF range: 50 feet minimum Uses 4 size "AA" alkaline batteries. 1.5VDC ea. Made in China.

LIMITED 6 YEAR WARRANTY

If within six (6) years from the date of purchase, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it, as its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

INTERMATIC INCORPORATED WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL

DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY MODIFIED TO EXIST ONLY AS CONTAINED IN THIE LIMITED WARRANTY, AND SHALL BE OF THE SAME DURATION AS THE WARRANTY PERIOD STATED ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATIONS OF AN IMPLIED WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid to the authorized service center listed below. This warranty is made by: Intermatic Incorporated/After Sales Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698/815-675-7000 http://www.intermatic.com Please be sure to wrap the product securely to avoid shipping damages.