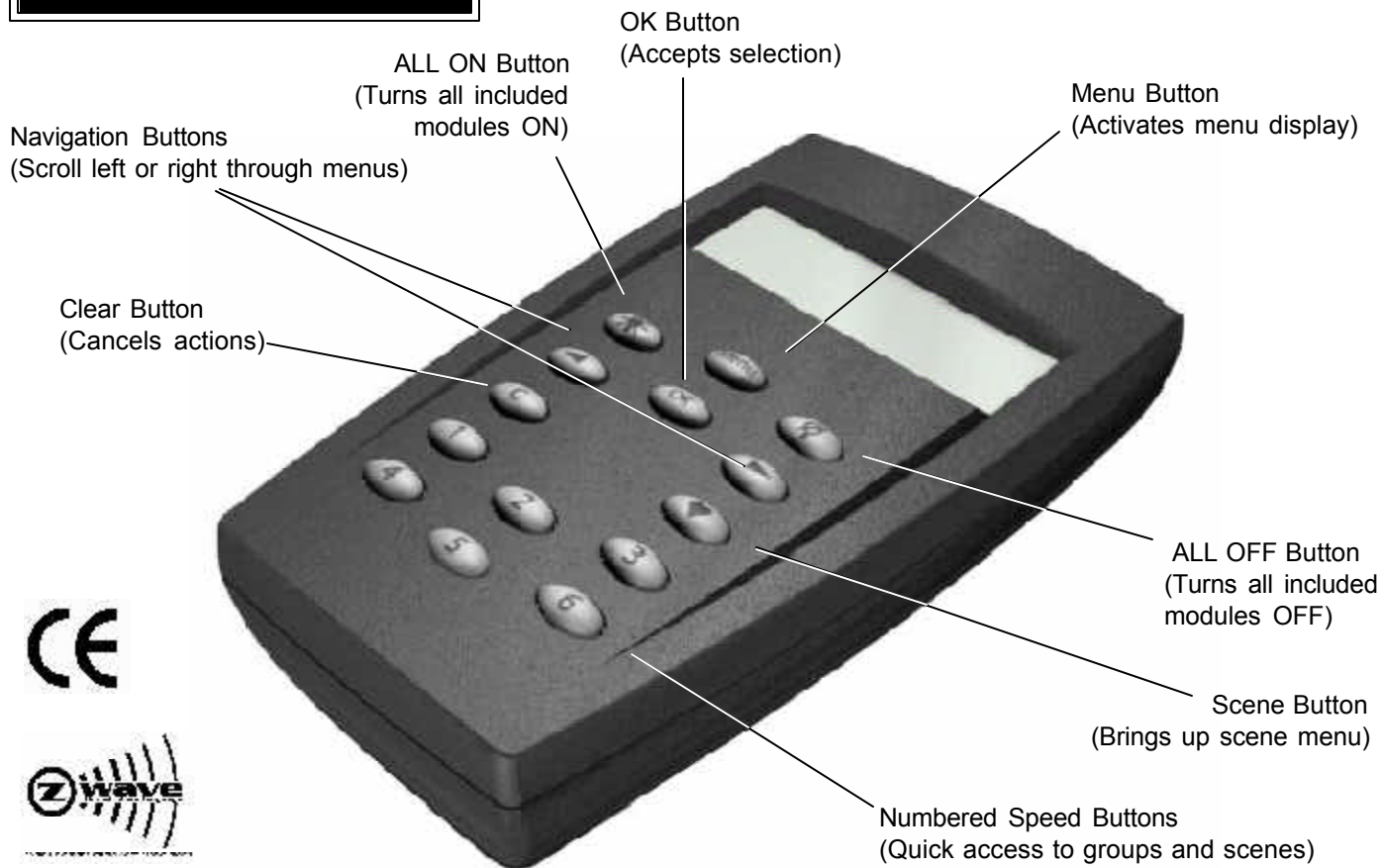**HomePro**
RF Home Automation

User Manual
for
HomePro ZTH200
Wireless Controller

Version 1.26

Note: This module must be "Included in the Network" **only where it will be permanently installed**. The proper operation of this node in the <u>mesh network</u> is dependent on it knowing its location with respect to other nodes. You cannot "test bench" configure this module.

OK Button
(Accepts selection)

ALL ON Button
(Turns all included modules ON)

Menu Button
(Activates menu display)

Navigation Buttons
(Scroll left or right through menus)

Clear Button
(Cancels actions)

ALL OFF Button
(Turns all included modules OFF)

Scene Button
(Brings up scene menu)

Numbered Speed Buttons
(Quick access to groups and scenes)

BEFORE YOU BEGIN...

READ ALL INSTRUCTIONS

Remove battery cover on rear of control. Install two (2) AA alkaline batteries (included).

There are no field repairable assemblies on this unit. For warranty and general product information visit our web site at www.act-solutions.com. If service is needed, the unit must be returned where purchased.

BUTTON LAYOUT

MENU	ACTIVATES THE MENU DISPLAY.
OK	ACCEPTS CHOICES ON THE DISPLAY.
LIGHT BULB (SOLID)	ALL MODULES ON.
LIGHT BULB (w/ SLASH)	ALL MODULES OFF.
LEFT ARROW	MENU NAVIGATION BUTTON, LEFT.
RIGHT ARROW	MENU NAVIGATION BUTTON, RIGHT.
C	CLEAR. CANCELS ACTIONS.
S	SCENE BUTTON. TURNS SCENES ON/OFF (THESE ARE GROUPS OF MODULES & DIM SETTINGS PREDETERMINED BY USER).
"1" TO "6"	SPEED BUTTONS. QUICK ACCESS TO USER DEFINED GROUPS AND SCENES.

HomePro
RF Home Automation

WIRELESS CONTROLLER

This user manual is designed to guide you through the setup and features of the HomePro Z-Wave Lighting and Appliance Control System. You will be amazed at the possibilities for control.

You can easily enhance the comfort and security of your home or office. You'll see how easy it is to quickly create a totally customized system that can remotely control lamps and appliances without costly professional installation...a system that any do-it-yourself person can easily handle.

For example, with just one Wireless Controller you can control up to 64 individual lamp units or wall switches!

You can control a single receiver, in groups, or all receivers at once. You can turn on custom programmed mood lighting and use timers for lighting as a burglar deterrent.

This user guide tells you how to create your system. Instructions for installation and setup of built-in components (wall switches, dimmers, etc.) are included with those components.

The HomePro Z-Wave Lighting and Appliance Control System gives you the following functionality.

Safety and Security

- **All OFF/ALL ON**
  On the way out you can turn off all lights in the house with one button. At night, if you hear noises, you can turn all lights in the house on from your bedroom.

- **Timers**
  Let the clock control your lamps and appliances so they automatically turn on and off at preset hours. You won't ever have to come into a dark house again.

Comfort

- **Remote Control**
  Control your lights wirelessly from the sofa, the bed, the kitchen or wherever you are.

- **Grouping**
  No more wandering from lamp to lamp. Control groups of lamps simultaneously with one button.

- **Scenes**
  Create and save custom lighting scenes for special occasions like dinner parties, TV watching, romantic atmosphere, book reading, etc.

- **Dimming**
  Dimming lights with the HomePro Control System saves on electric bills.

- **Thermostat Control**
  Switch from Heating to Cooling modes and adjust setpoint from your easy chair.

Full Coverage plus added communication with Version 1.26

One of the key features of the HomePro Z-Wave is the fact that Z-Wave automatically routes the signal from one device to the next, effectively going around obstacles and radio dead spots in your home or office. You only need to be within 100 feet of any HomePro Z-Wave device to communicate with all other HomePro Z-Wave devices, so the more HomePro Z-Wave enabled devices you have in your home or office, the better the coverage and the more reliable the network becomes.

New software features (Version 1.26) allow changing the factory configuration of devices and reviewing the settings. In addition it allows association of a device with other specific devices and a review of those associations. The software version of any HomePro ZTH200 can be verified by going to: Setup Menu/Reset Remote Control/Factory Default/press ALL LIGHTS OFF button.

The ZTH200 allows most devices into a group so they can be controlled by the remote. The device types that will specifically not be added to a group (though they will be added to the Z-Wave system) are the following: Thermostat Controller, Repeater Slave, Binary Sensor, Multilevel Sensor, Pulse Meter, Entry Control and Non Interoperable.

The types listed above will not be controlled by the remote because they either have nothing to control or do not support the BASIC COMMAND which the remote uses to turn devices on and off. Device ID is shown when the device is added to the network.

Introduction to HomePro Products

ZIR000
PIR Occupancy &
Security Sensor

ZDP200
Plug-in Dimmer

ZDP210
Plug-in Dimmer

ZDP230
Plug-in Dimmer

ACT #	Product Description
ZDP200	Dimmer, 300W, 230 VAC, Plug-in, Euro plug (Netherlands etc.), Ivory
ZRP200	Relay, 10A, Plug-in, 230 VAC, Euro plug (Netherlands etc.), Ivory
ZDP210	Dimmer, 300W, 230 VAC, Plug-in, UK plug, Ivory
ZRP210	Relay, 10A, Plug-in, 230 VAC, UK plug, Ivory
ZDP230	Dimmer, 300W, 230 VAC, Plug-in, French plug, Ivory
ZRP230	Relay, 10A, Plug-in, 230 VAC, French plug, Ivory
ZCS010	Transceiver-Controller, RS232 Interface - Euro Frequency (power supply not provided)
ZCU010	Transceiver-Controller, USB Interface - Euro Frequency, hub powered
ZCU011	Transceiver-Controller, USB Interface - Euro Frequency (power supply not provided)
ZTT000	Thermostat, 24V, Wall mount, Euro Frequency, White
ZIR010	Transmitter, PIR, Wall mount, Battery Operated, Euro Frequency, White
ZTH200	Transceiver, Wireless Controller

This controller is designed to work with the HomePro products shown. Most other Z-Wave modules of other device classes can be added to the system and will also act as repeaters if they support this functionality..

SYSTEM DESCRIPTION

The HomePro product line from Advanced Control Technologies includes several products that are intended to work together to provide convenient control of all of your home lighting and appliances. By using the ZTH200 Wireless Controller, all of these HomePro devices are linked by a state of the art wireless communications network featuring patented Z-Wave technology. This technology insures that the commands that you give through the Wireless Controller are reliably communicated by radio frequency to the intended HomePro device.

The Wireless Controller operates up to 64 HomePro devices, which include both plug-in and wall mounted dimmers and switches. The Wireless Controller finds a way to route your commands to the intended device through other HomePro dimmers and switches. This is possible because each of these devices are designed to retransmit the commands that are sent through them to adjacent devices that might otherwise be out of range of the Wireless Controller. The Z-Wave system provides that a command can be routed if necessary through as many as four different devices in route to the intended device.

Communication with devices employing Z-Wave technology is bidirectional. That is, when a command is sent from a Wireless Controller, an acknowledgment is sent back to it by the affected devices to confirm that the command was received (not necessarily that the load changed state). In the unusual situation in which a command is not properly received, a message will appear on the Wireless Controller's display to inform the User.

Table of Contents

1. INTRODUCTION

1.1 GETTING STARTED

Congratulations on your purchase of the ZTH200 and other HomePro components. This manual will guide you in understanding the full capabilities of the HomePro System and operation of the Wireless Controller.

Remove battery cover of ZTH200 Controller and install two AA batteries noting the correct direction.

2. TIME

2.1 SETTING THE TIME

To set time, begin by pressing "MENU" button.

Fig. 00-26
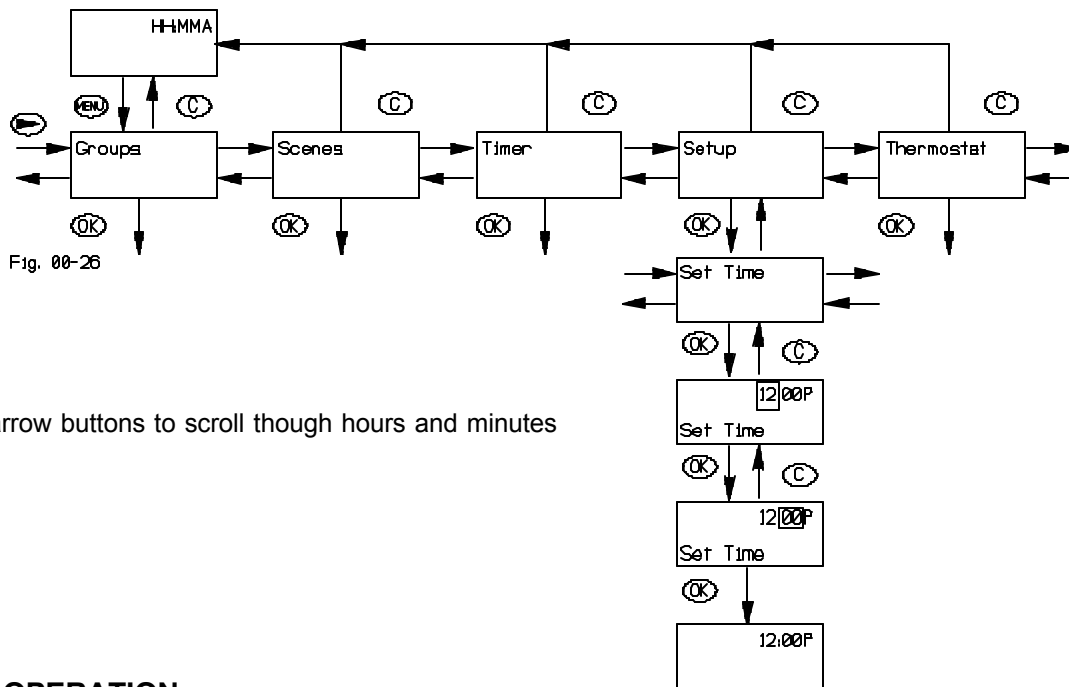
Note: Use arrow buttons to scroll though hours and minutes

3. GENERAL OPERATION

3.1 WIRELESS CONTROLLER SOFTWARE FEATURES.

• Provides user level control for 64 modules (i.e. one module, one group).

• Allows configuring of 64 groups.

• Eight (8) timers are available to the user. Each timer can be used to control any one of the existing groups.

• Displays the time in 12 hour AM/PM format.

• Allows multiple wireless controllers (one master and one or more secondary ones) in various locations for convenience.

• Allows multiple Wireless Controllers *"Each wireless controller comes pre-programmed from the factory with a unique Home ID. This ID prevents unintended access to a user's network of modules by neighbors or others who may also be using HomePro products. If a user desires to add additional controllers to their HomePro network however, there is a provision to allow this to be done without compromising this important feature (see section 4.6.5)."*

3.2 POWER DOWN AND DISPLAY TIME-OUT

The ZTH200 goes into a power saving mode after a period of inactivity in order to conserve battery life. Pressing any button will cause the unit to "wake up" and process any of your commands. The display is blank in the power down mode.

4. HOW TO USE THE ZTH200 FEATURES

4.1 MENU NAVIGATION AND SELECTION

Pushing the "Menu" button will activate the menu display.:

a. [◄] and [►] buttons are used to navigate through the menu. All menu levels wrap around.

b. [OK] activates the currently selected menu item and recalls information from thermostat.

c. [C] (or Clear) cancels the currently selected item and will in most instances step back to the previously selected menu level. If used from top menu level the Controller will return to clock display.

The top menu level behaves like this: Using the right and left arrow buttons you can toggle right or left through the menu selections of :
      GROUPS
      SCENES
      TIMER
      SETUP
      THERMOSTAT

Top level menus wrap around, so arrow buttons in any direction will repeat menu selections. Push OK or C button to activate display if asleep (blank).
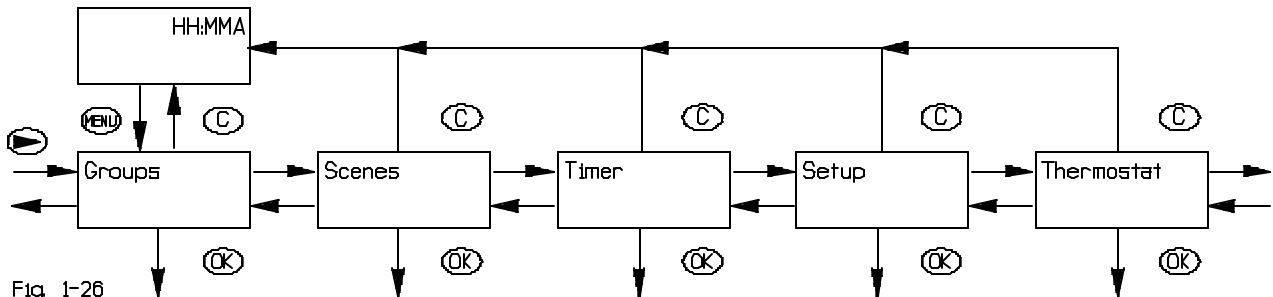
Fig. 1-26

Select any one by pressing OK. Follow instructions to set up that function (explained in following paragraphs). Using the Clear button (C) at any time will take you back to the Time (which will auto-off after 5 seconds).

4.2 GROUPS/SCENES

The layout and behavior of the "groups" and "scenes" menus are very similar. Where they are identical, "groups" is used as an example. Push OK or C button to activate display if asleep.
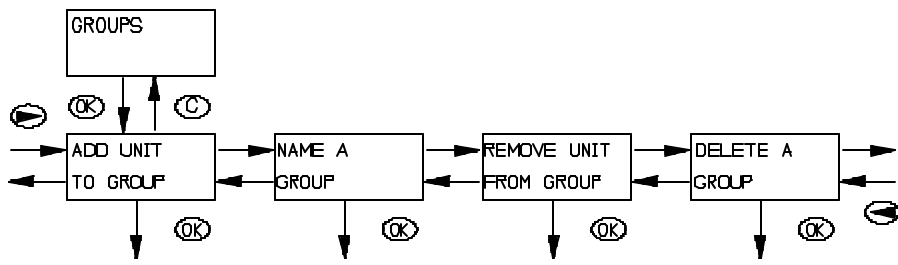
To select groups from **7 to 64** or scenes from **7 to 32** see page 28, section 5.5.2 and 5.2.3.

4.2.1 ADD MODULE TO GROUP
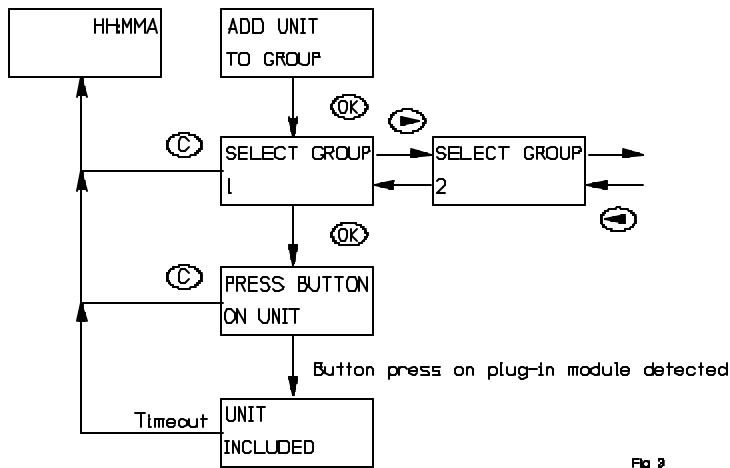
Adding a module to a group using the menu is done this way:

A *group* is a set of one or more modules that are to be *operated together as if they were one device.* More specifically, every module that is included in a group will switch on or off together as that group is turned on and off. When a group is activated, each Lamp Module in that group turns on, returning to its last dim level – a level that in general, will differ from module to module. Appliance Modules may also be included in groups. A module must be "Included in the Network" **only where it is permanently installed, not at a test bench**.

Alternatively if the group has been named, the name shows up instead of the number. To add more units repeat the procedure "ADD UNIT TO GROUP". *Groups and scenes may each be given user-defined names. See section 4.2.5 for instructions on how to do this.*

Flowchart (Fig 3):

HH:MMA → ADD UNIT TO GROUP

(OK) / ▷ → SELECT GROUP 1 ⇄ SELECT GROUP 2 (◁)

C → (back to HH:MMA)

SELECT GROUP 1 → (OK) → PRESS BUTTON ON UNIT

C → (back)

Button press on plug-in module detected

PRESS BUTTON ON UNIT → UNIT INCLUDED

Timeout → (back to HH:MMA)

Fig 3

4.2.2 ADD MODULE TO SCENE.
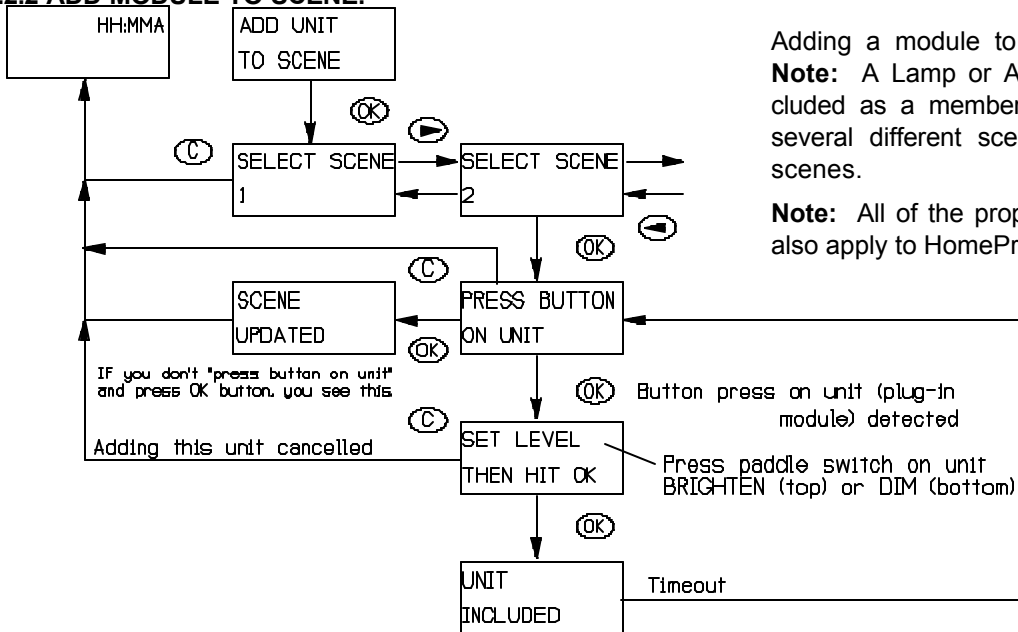
Adding a module to a scene is done this way:
Note: A Lamp or Appliance Module may be included as a member of several different groups, several different scenes, or several groups and scenes.

**Note:** All of the properties of groups and scenes also apply to HomePro wall dimmers and switches.

Flowchart (Fig 4):

HH:MMA → ADD UNIT TO SCENE

(OK) / ▷ → SELECT SCENE 1 ⇄ SELECT SCENE 2 (◁)

C → (back to HH:MMA)

SELECT SCENE 1 → (OK) → PRESS BUTTON ON UNIT

C → SCENE UPDATED (OK)

IF you don't "press button on unit" and press OK button, you see this

Adding this unit cancelled

C → SET LEVEL THEN HIT OK

(OK) Button press on unit (plug-in module) detected

Press paddle switch on unit BRIGHTEN (top) or DIM (bottom)

SET LEVEL THEN HIT OK → (OK) → UNIT INCLUDED

Timeout → (back)

Fig 4

A *scene* is a combination of one or more modules, except that the controller *stores not only the combination, but also the desired dim level* for each Lamp Module. The dim level is stored at the time that a Lamp Module is added to a scene. Consequently, when a scene is activated, the Lamp Modules will all go to their previously defined dim levels regardless of what their most recent dim level may have been. Some modules may get brighter while others may be pre-programmed by the user to become dimmer. Because Appliance and Wall Switch Modules are switching devices, they will either be defined as on or off when added to a scene.

Note that hitting "C" will not clear units that have already been stored in the selected scene. A module is stored in a scene when "UNIT INCLUDED" is shown in the display.

4.2.3 EXCEEDING MODULE LIMIT.

This ZTH200 Controller supports up to 64 modules. If the user tries to add more than 64 modules to a group or scene this message will be displayed:

```
ONLY  ADDED
TO NETWORK
```
Fig. 5-26

However the module will be given a valid ID and it will be used as a repeater if it supports this functionality, but it cannot be directly controlled by this ZTH200 Wireless Controller. If a secondary Wireless Controller which handles more than 64 modules (could even be HomePro's USB to RF controller) is set up using this Wireless Controller, then the module will be made available for control in that secondary controller.

4.2.4 ADDING UNSUPPORTED DEVICE TYPES TO THE NETWORK

Devices of other types such as Remote Controller, Static Controller, Thermostat Controller, Repeater Slave, Binary Sensor, Multilevel Sensor, Pulse Meter, Entry Control and Non Interoperable; they just cannot be controlled by this ZTH200. If the user adds an unknown device to the network this information will be displayed:

```
ONLY  ADDED
TO NETWORK
```
Fig. 5-26

4.2.5 NAME A GROUP/SCENE

To name a group or scene enter the relevant menu. Then select the group/scene name to be edited.
In order to delete a name, just select the group/scene and clear the old name using "C".

Note: Outlined area indicates "blinking" cursor.

```
NAME A
GROUP
```
↓ OK

```
SELECT GROUP        SELECT GROUP
1                   2
```
→ ↻

↓ OK

```
GROUP  1:   GROUP  1:   GROUP  1:   GROUP  1:
9                       A           B
```

The character under
the blinking cursor
is not stored
until OK is held down

Hold for 2 seconds

```
GROUP  1:
A
```
C / OK

MENU

```
XX:XXA
_
```
No new group
name stored

```
XX:XXA
```
Group name cleared

↓ OK Hold for 2 seconds

```
XX:XXA
_
```
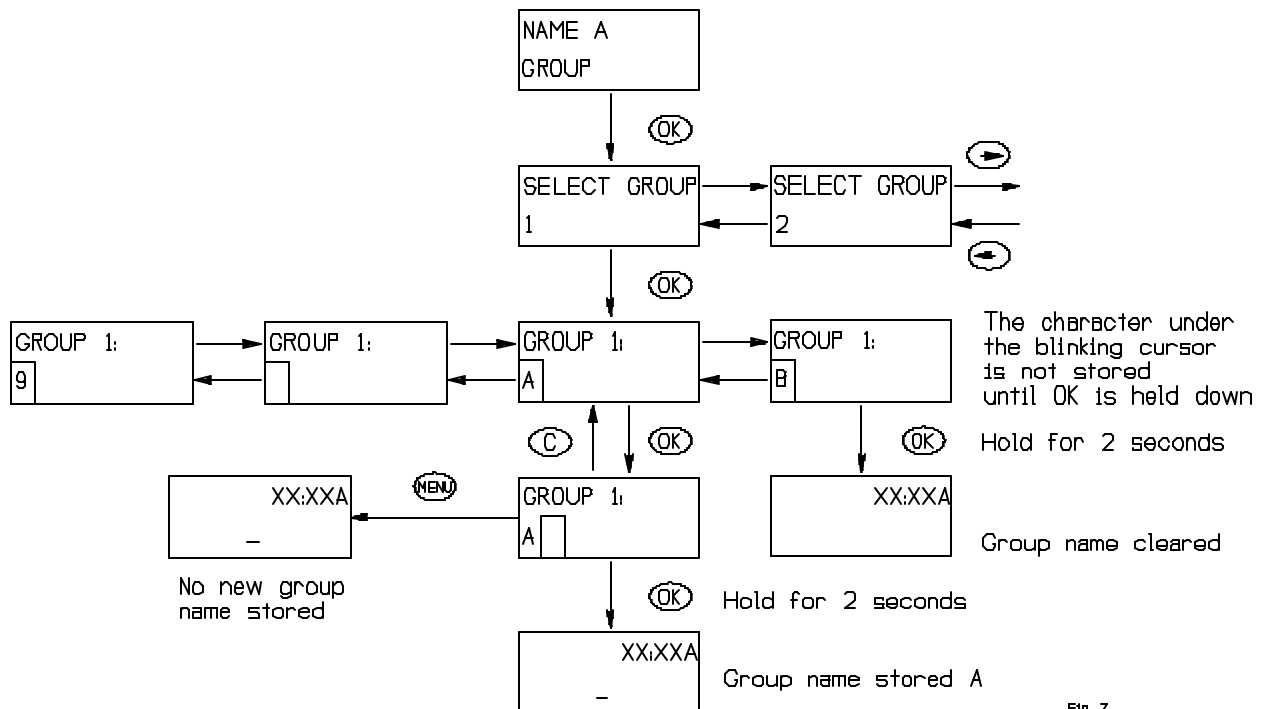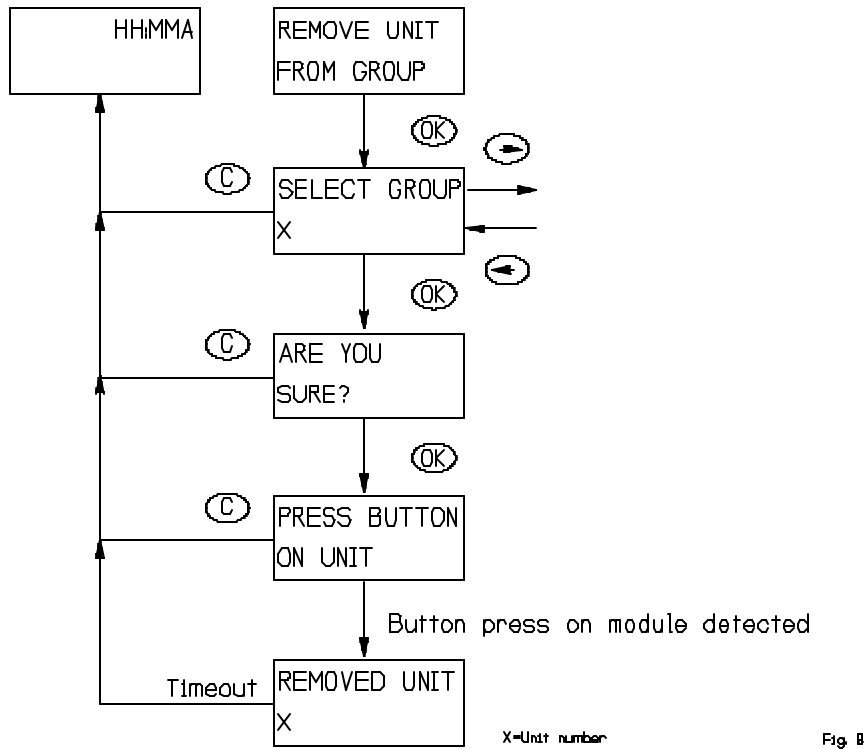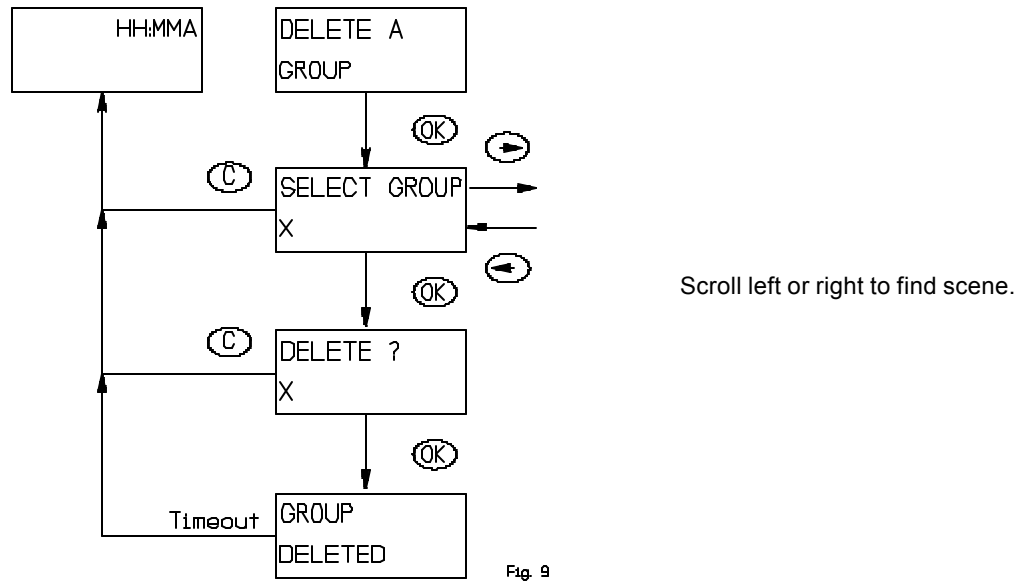Group name stored A

Fig. 7

4.2.5.1 CHARACTER SET.

The characters available for naming are: 'A','B','C','D',..,'Z', and '0','1','2',..,'9',' '
Note that no lower case letters are available to the user.

4.2.6 REMOVE MODULES FROM GROUP/SCENE.

```
   ┌──────────┐        ┌──────────────┐
   │  HH:MMA  │        │ REMOVE UNIT  │
   │          │        │ FROM GROUP   │
   └──────────┘        └──────────────┘
        ▲                    │  (OK)  ──▶
        │             (C)    ▼        ┌──────────────┐
        │               ┌──────────────┐
        │               │ SELECT GROUP │ ──────▶
        │               │ X            │ ◀──────
        │               └──────────────┘
        │                    │  (OK)  ◀──
        │             (C)    ▼
        │               ┌──────────────┐
        │               │ ARE  YOU     │
        │               │ SURE?        │
        │               └──────────────┘
        │                    │  (OK)
        │             (C)    ▼
        │               ┌──────────────┐
        │               │ PRESS BUTTON │
        │               │ ON UNIT      │
        │               └──────────────┘
        │             Button press on module detected
        │                    ▼
        │   Timeout   ┌──────────────┐
        └─────────────│ REMOVED UNIT │
                      │ X            │
                      └──────────────┘
                         X=Unit number          Fig. 8
```

Clear cancels the current selection. Navigation buttons only work if more than one group or scene exists.

4.2.7 DELETE GROUP/SCENE

```
   ┌──────────┐        ┌──────────────┐
   │  HH:MMA  │        │ DELETE  A    │
   │          │        │ GROUP        │
   └──────────┘        └──────────────┘
        ▲                    │  (OK)  ──▶
        │             (C)    ▼
        │               ┌──────────────┐
        │               │ SELECT GROUP │ ──────▶
        │               │ X            │ ◀──────
        │               └──────────────┘          Scroll left or right to find scene.
        │                    │  (OK)  ◀──
        │             (C)    ▼
        │               ┌──────────────┐
        │               │ DELETE  ?    │
        │               │ X            │
        │               └──────────────┘
        │                    │  (OK)
        │             (C)    ▼
        │   Timeout   ┌──────────────┐
        └─────────────│ GROUP        │
                      │ DELETED      │
                      └──────────────┘
                                        Fig. 9
```

If no active groups or scenes exists the following occurs:

```
DELETE
GROUP
          (OK)
           |
           v
NO ACTIVE
GROUPS        Fig. 10
```

4.3 TIMER

The timer menu consists of the following menus:

```
TIMER

  (C)    (OK)
              (->)
CREATE/EDIT ----> DELETE A
A TIMER    <----   TIMER
              (<-)
  (C)    (OK)    (C)    (OK)
                          Fig. 11
```

Timer information is stored in the Wireless Controller – not in the module.

4.3.1 CREATE/EDIT A TIMER

There are eight timers available for the user. Each timer controls one of the existing groups as chosen by the user.

```
HH:MMA      CREATE/EDIT
  _    <--- A TIMER
                |
               (OK)
                |     (->)
(C)  TIMER      v   TIMER
1:        FREE <--- 2:      12:05A
                (<-)
     (C)   (OK)    (C)   (OK)
                          Fig. 12
```

If an existing timer is selected that timer will be edited. Pressing the clear button will cancel the editing and leave the timer as it was. The time indicated when selecting a timer is the start time of that timer.

Once a timer has been selected the following flow is executed when creating/editing a timer:

HH:MMA		CREATE/EDIT
_		A TIMER

OK →

C

TIMER	→	TIMER
1: FREE	←	2: 12:05A

C ↑ OK ← C ↑ OK

ON: HH MMA	→
OFF: HH:MMA	←

The crosshatched block indicates a blinking cursor

C ↑ OK

ON: HH:MM A	→
OFF: HH:MMA	←

Use arrow buttons to scroll through hours and minutes

C ↑ OK

ON: HH:MMA	→
OFF: HH MMA	←

C ↑ OK

ON: HH:MMA	→
OFF: HH:MM A	←

C ↑ OK

ACTIVATE	→	ACTIVATE
ONE TIME	←	EVERY DAY

C ↑ OK

HH:MMA		SELECT GROUP	→
_		1	←

Use arrow buttons to select group

OK

Timeout

TIMER
CREATED

Fig. 13

If a group is named the group name will be shown.

4.3.2 DELETE TIMER

When a timer is no longer needed it can be deleted using "Delete a timer" menu.
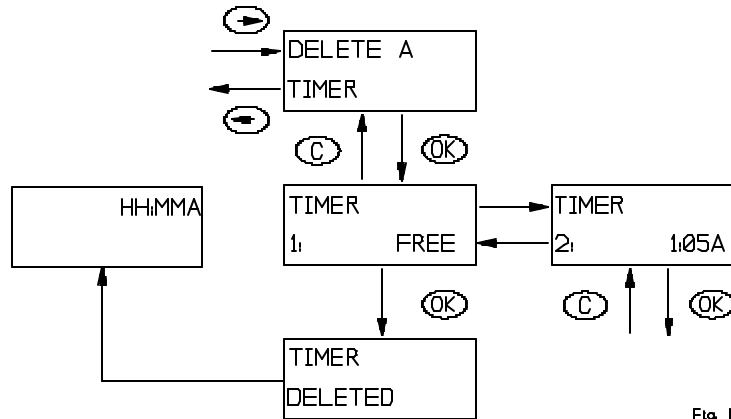
Fig. 14

4.4 ADD THERMOSTAT
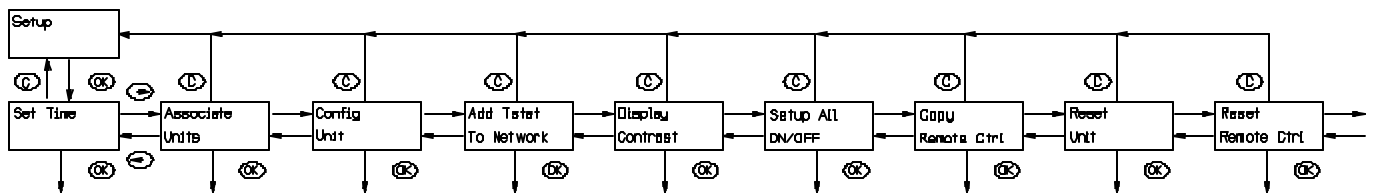
Fig. 21-28

The ZTH200 will support only one (1) thermostat. If more than one (1) thermostat needs supported, then more ZTH200's will be required.

Scroll to the Setup Menu and Press OK.

Scroll to **"Add Tstat To Network"** and Press OK.

ZTH200 will prompt **"Press Button On Unit".**

Once thermostat is added, the ZTH200 will show **"Tstat Incl'd, with Support"**.

This indicates that the thermostat was included into the Z-Wave network and that the ZTH200 was able to retrieve the modes and set points the thermostat supports.

If the remote only shows **"Thermostat Included"** or **"T'stat Incl'd, w/No Support"** then the supported modes and set points were not received from the thermostat and the ZTH200 will not allow the user to access all of the thermostat functions. If this occurs, simply add the thermostat to the ZTH200 again until it shows **"Tstat Incl'd with Support".**

4.4.1 REQUESTING DATA FROM THERMOSTAT

After the thermostat has been included into the ZTH200, repeatedly pressing the OK button will cause the ZTH200 to toggle between showing the actual temperature (if the thermostat supports sending actual temperature), current mode and current set point of the mode, and fan mode (if the thermostat supports fan modes),

4.4.2 CHANGING THERMOSTAT SETTINGS

Fig. 15-20

Scroll to Thermostat and Press OK.
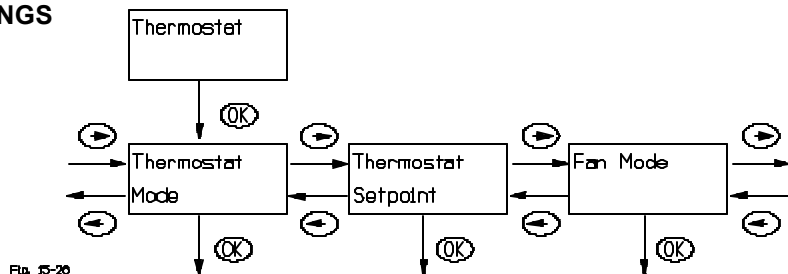
You will see Thermostat Mode. At that point you could scroll left or right to change Set point or Fan Speed.

If instead you press OK, you will be directed to the thermostat modes of control (i.e.. Cooling, Heating, etc.).

In each case, the remote will retrieve the current setting of the thermostat and then allow you to change that setting (depending on what is supported by the thermostat).

4.4.3 THERMOSTAT MODES

The ZTH200 supports HEAT MODE, COOL MODE, AUTO MODE, AUTO CHANGEOVER MODE, DRY AIR MODE, FAN MODE ONLY, FURNACE MODE, MOIST AIR MODE. Scroll left or right to select. After you have changed the setting, press OK.

Fig. 15A20
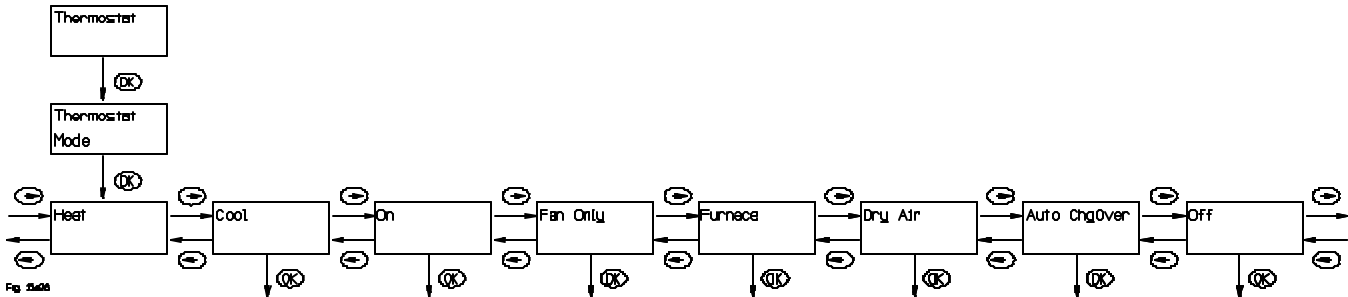
If setting was recorded, display will say **"Mode Successful"**. If not it will say **"Comm. Failed"**, in which case reorient the ZTH200 and try again.

4.4.4 THERMOSTAT SETPOINT

The ZTH200 supports sending set points from 55° F to 90° F and from 12° C to 32° C. Scroll left or right to select desired set point.
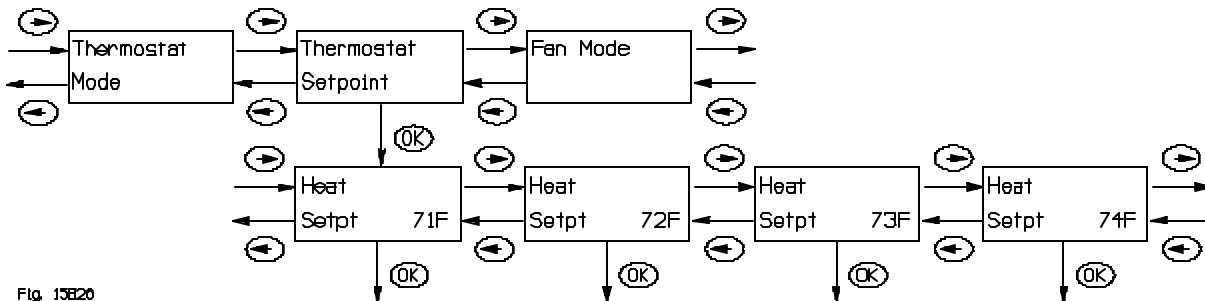
Fig. 15B20

The ZTH200 will display set points from 40° F to 90° F or from 4° C to 32° C. Above and Below those limits and the ZTH200 will display **> Max** or **< Min**. After you have changed the setting, press OK. If setting was recorded, display will say **"Setpoint Successful"**. If not it will say **"Comm. Failed"**, in which case reorient the ZTH200 and try again.

4.4.5 FAN MODES

The ZTH200 supports FAN MODE AUTO (high), FAN MODE ON (high), FAN MODE AUTO (low), FAN MODE ON (low). Scroll left or right to select. After you have changed the setting, press OK.
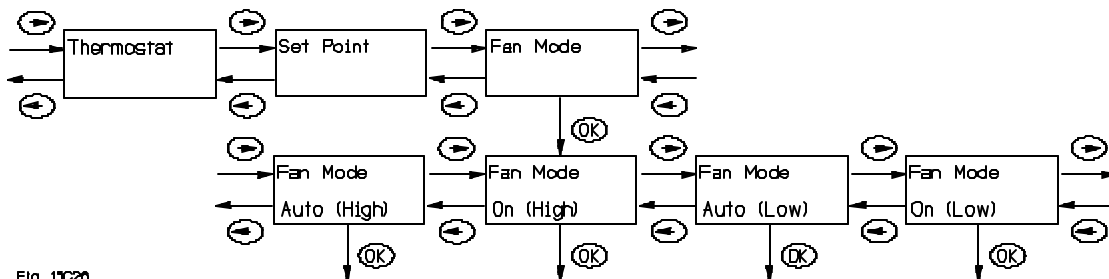

Fig. 15C20

4.5 REMOVING THERMOSTAT

To Remove Thermostat from Network, Scroll to Setup Menu, Choose "Reset Unit" and Press OK. (See Setup Menu 4.6).

4.6 SETUP

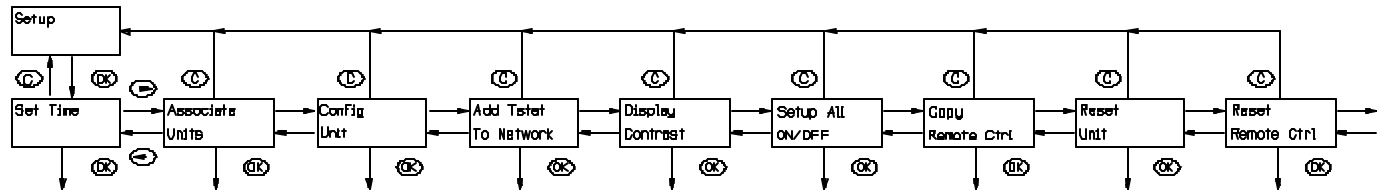The setup menu is used to access system functions. The layout is as follows:

Fig. 21-26

4.6.1 ASSOCIATION MENU

Allows you to associate other units to a module that supports this feature.

When you select "Associate Units" above, the following menu will appear:
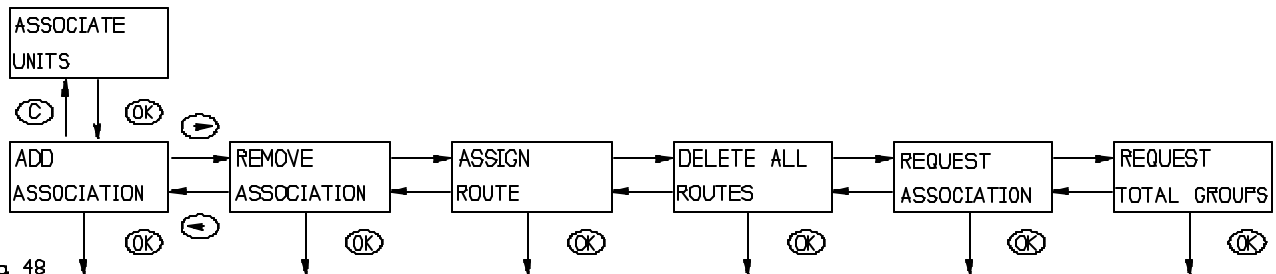
Fig. 48

ADD ASSOCIATION

Used when you want to associate one unit to another unit. The term associate means linking two units so that one unit will send information to the other unit. The unit doing the sending is the source and the unit receiving the information is the destination. If the modules are not within range of one another, refer to **"Assign Route"** below.

When you select Add Association, you will be prompted to select a group number as shown below:
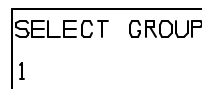
```
SELECT GROUP
1
```
Fig. 49

This group number is the group within the source module in which the destination module will be placed when associated. What each group is sent and does is solely dependent upon the source module. Refer to the instructions that came with the source module.

Once the group number is selected (using the arrow buttons), press OK.

Now you will be prompted to **"Press Button on Destin."**. This indicates you should now press the button on the destination module. Refer to instructions of destination module on exactly what to do in this situation as you may have to do more than simply pressing a button.

When the ZTH200 receives the destination module ID, it will then request you to **"Press Button on Source"**. Refer to instructions of source module on exactly what to do in this situation as you may have to do more than simply pressing a button.

After you have pressed the button on the source, the ZTH200 will either show **"Successful"** or **"Comm. Failed"**. If the ZTH200 shows **"Comm. Failed"**, simply try again or move closer to the source module and try again.

REMOVE ASSOCIATION

Used when you want to remove an association in a unit . The unit in which the association is removed is the source module and the unit being removed is the destination module. When you select **"Remove Association"**, you will be prompted to select a group number.
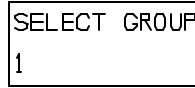
```
SELECT GROUP
1
```
Fig. 49

What each group does is solely dependent upon the source module. What each group is sent is also dependent upon source module. Refer to the instructions that came with the source module.

Once the group number is selected (using the arrow buttons), press OK.

Now you will be prompted to **"Press button on Destin."**. This indicates you should now press button on the destination module. Refer to instructions of destination module on exactly what to do in this situation as you may have to do more than simply pressing a button.

When the ZTH200 receives the destination module ID, it will then request you **"Press Button on Source"**. Refer to instructions of source module on exactly what to do in this situation as you may have to do more than simply pressing a button. After you have pressed the button on the source module, the ZTH200 will either show **"Successful"** or **"Comm. Failed"**. If the ZTH200 shows **"Comm. Failed"**, simply try again or move closer to source module and try again.

REQUEST ASSOCIATION

If you desire to determine what modules a source module sends to, this function will allow you to determine that information.

When you select **"Request Association"**, you will be prompted to select a group number.

```
SELECT GROUP
1
```
Fig. 49

This group number is the group within the source module in which the destination module will be placed in when associated. What each group is sent and does is solely dependent upon the source module. Refer to the instructions that came with the source module.

Once the group number is selected either using the arrow buttons, **press OK**.

Now you will be prompted to **"Press Button on Unit"** . Refer to instructions of module on exactly what to do in this situation as you may have to do more than simply pressing a button.
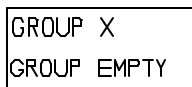
When the ZTH200 receives the information from the unit, the ZTH200 will either show:

```
GROUP X
Use <-->
```
Fig. 50
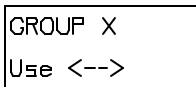
Use the arrows to show the units in the group.

Or it will show:

```
GROUP X
GROUP EMPTY
```
Fig. 51

Which indicates the group is empty in the ZTH200.

Pressing the OK button at this point will also show you how many modules the group can support.

If the ZTH200 requests the association settings but does not receive information from the unit, the ZTH200 will simply show **"Request Sent"** until the ZTH200 receives the information, goes to sleep, or you press the CLEAR button.

REQUEST TOTAL GROUPS

Although typically this information would be provided in the slave modules instructions, this function will allow you to determine how many groups a device supports.

When you select **"Request Total Groups",** you will be prompted to **"Press Button On Unit"** . Refer to instructions of unit on exactly what to do in this situation as you may have to do more than simply pressing a button.

After you have done so, the ZTH200 will show:

```
TOTAL GROUPS
N
```
Fig. 52

where N is the number of groups in the ZTH200.

Also, if the ZTH200 requests the total groups a unit supports but does not receive information from the unit, the ZTH200 will simply show **"Request Sent"** until the ZTH200 receives the information, goes to sleep, or you press the CLEAR button.

4.6.1.1 ASSIGN ROUTE

When two devices are not within range of one another, then a route can be assigned to the source module (the device sending the information). This is dependent upon whether the source module is a normal slave or a routing slave. It must be a routing slave (The routing slave can host a number of routes to communicate with a slave or controller but the normal slave is typically a device that only receives input and reports status if polled). Again, the unit doing the sending is the source module and the unit receiving the information is the destination module. Also of note, some routing slaves only hold routes to one module, while newer routing slaves can hold routes to up to 5 modules. Refer to instructions that came with device.

When you select **"Assign Route"**, you will be prompted to **"Press Button On Destin."**. Refer to instructions of destination module on exactly what to do in this situation as you may have to do more than simply pressing a button.

When the ZTH200 receives the destination module ID, you will be prompted to **"Press Button On Source"**. Refer to instructions of source module on exactly what to do in this situation as you may have to do more than simply pressing a button. After you have pressed the button on the source module, the ZTH200 will either show **"Successful"** or **"Comm. Failed"**. If the ZTH200 shows **"Comm. Failed"**, simply try again or move closer to source module and try again.

Note that units may still be unable to communicate to one another if there are no other modules that can communicate to both the source and destination module.

DELETE ALL ROUTES

Removes **all** routes that were previously assigned to a routing slave.

When you select **"Delete All Routes"** , you will be prompted to **"Press Button On Unit"**. Refer to instructions of module on exactly what to do in this situation as you may have to do more than simply pressing a button.

After pressing button, the ZTH200 will then show **"All Successful"** or **"Comm. Failed"**. If the ZTH200 shows **"Comm. Failed"**, simply try again or move closer to module and try again.

4.6.2 CONFIG UNITS MENU

Allows you to send/receive configuration settings to a Z-Wave unit that supports such functionality.

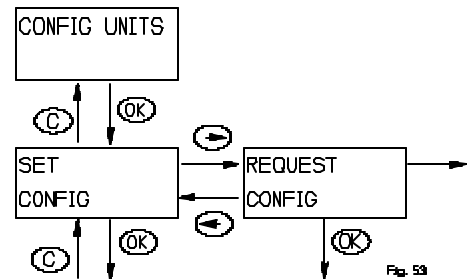When you select **"Config Units"** , the following menu will appear:

Fig. 53

SET CONFIG

Allows you to set configuration settings to a unit that supports such functionality.   When you select **"Set Config"**, you will be prompted with

```
PARAMETER #?
1
```

Consult the instructions that came with the unit you are configuring as to what each parameter number configures.

After selecting parameter number (**use the arrow buttons** to change parameter number, **then press OK)**, you will be prompted:

```
# OF BYTES?
1, 2 OR 4
```

At this point, you will have to again consult the instructions for the unit you are configuring for information on how many bytes the parameter being set contains. **Then press the 1, 2, or 4 button accordingly**.   At this point you will be prompted:

```
CONFIGVALUE1
0
```

Use the arrow buttons to select value, **then press OK**.

If you have selected 2 or 4 bytes, when asked **"# of Bytes"**, you will be prompted for **ConfigValue 2** and if necessary **ConfigValue3** and **ConfigValue4**.

After selecting the value(s) you will be prompted to **"Press Button On Unit"**. Refer to instructions of unit on exactly what to do in this situation as you may have to do more than simply pressing a button.

After doing so, the ZTH200 will show **"Successful"** or **"Comm. Failed"**.   If the ZTH200 shows **"Comm. Failed"**, simply try again or move closer to unit and try again.

4.6.3 DISPLAY CONTRAST ADJUSTMENT
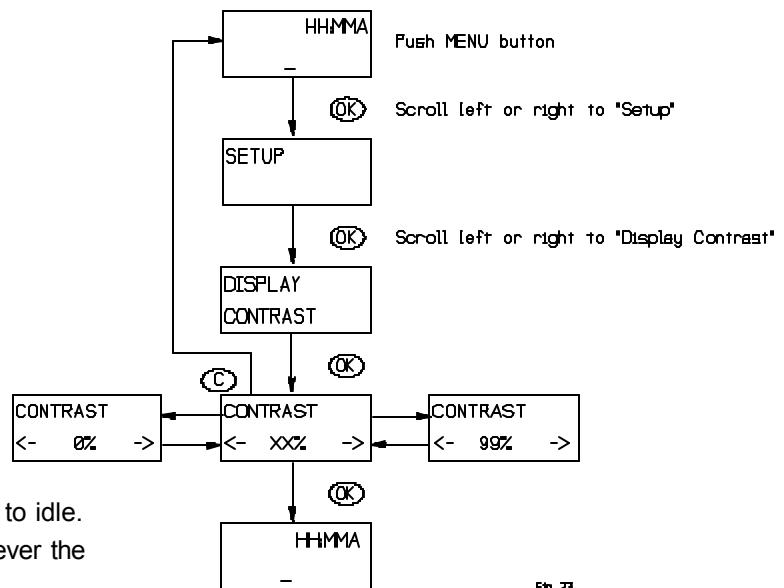
"C" cancels the contrast adjustment and returns to idle.

Default contrast is 50% which is restored whenever the batteries have been removed and reinstalled.

4.6.4 SETUP ALL ON/ALL OFF

Using this menu it is possible to customize the way ALL ON/ALL OFF works. Units can be included or excluded from all on/off commands (refer to instructions of the devices you are controlling to determine if it supports this feature).
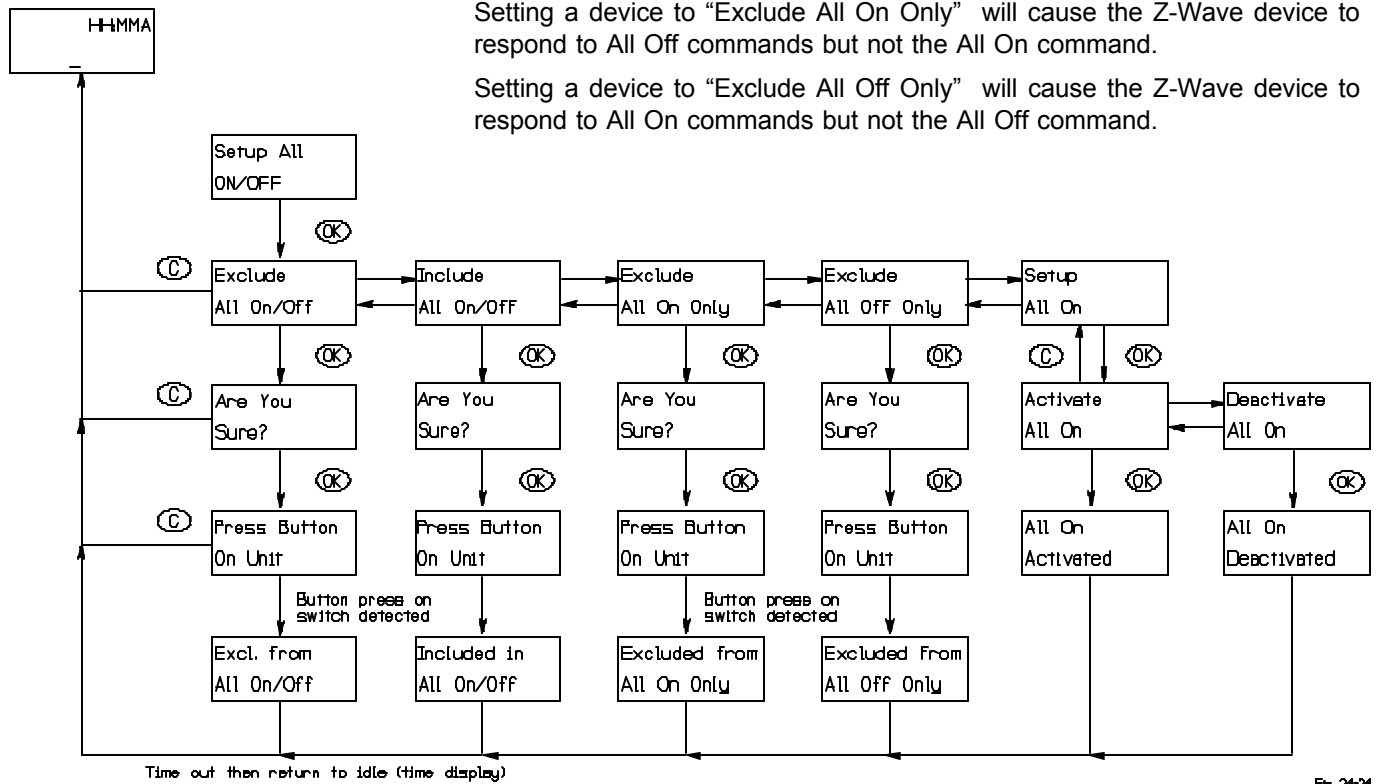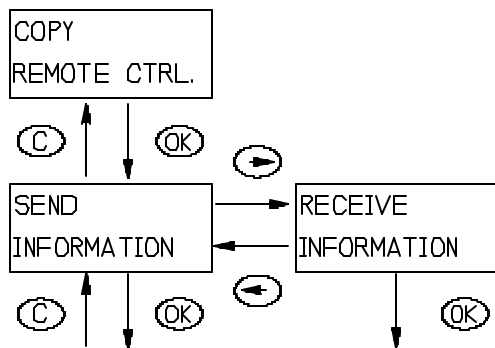
Setting a device to "Exclude All On Only" will cause the Z-Wave device to respond to All Off commands but not the All On command.

Setting a device to "Exclude All Off Only" will cause the Z-Wave device to respond to All On commands but not the All Off command.

```
┌──────────┐
│   HHMMA  │
│        _ │
└──────────┘
```

```
        ┌──────────┐
        │Setup All │
        │ON/OFF    │
        └──────────┘
             │ OK
   C  ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
      │Exclude   │──▶│Include   │──▶│Exclude   │──▶│Exclude   │──▶│Setup     │
      │All On/Off│◀──│All On/Off│◀──│All On Only│◀──│All Off Only│◀──│All On   │
      └──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘
          │OK            │OK            │OK            │OK         C │   │OK
   C  ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
      │Are You   │   │Are You   │   │Are You   │   │Are You   │   │Activate  │──▶│Deactivate│
      │Sure?     │   │Sure?     │   │Sure?     │   │Sure?     │   │All On    │◀──│All On    │
      └──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘
          │OK            │OK            │OK            │OK            │OK            │OK
   C  ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
      │Press Button│ │Press Button│ │Press Button│ │Press Button│ │All On    │   │All On    │
      │On Unit   │   │On Unit   │   │On Unit   │   │On Unit   │   │Activated │   │Deactivated│
      └──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘
   Button press on              Button press on
   switch detected              switch detected
      ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
      │Excl. from│   │Included in│  │Excluded from│ │Excluded From│
      │All On/Off│   │All On/Off│   │All On Only│  │All Off Only│
      └──────────┘   └──────────┘   └──────────┘   └──────────┘
```

Time out then return to idle (time display)

Fig 24-24

4.6.5 COPY REMOTE CONTROL TO ANOTHER WIRELESS CONTROLLER.

This menu is used to copy information from the Master Wireless Controller to other controllers, so that they may command modules known by the Master Wireless Controller.

Note: The <u>master</u> controller **must** be the controller used to include new modules to the network and to reset modules.

```
        ┌──────────┐
        │COPY      │
        │REMOTE CTRL.│
        └──────────┘
        C │  │ OK       →
        ┌──────────┐      ┌──────────┐
        │SEND      │─────▶│RECEIVE   │
        │INFORMATION│◀────│INFORMATION│
        └──────────┘      └──────────┘
        C │  │ OK    ←
                              │ OK
```

Fig. 25

A replication of the master controller is done as follows:

1. Select "Receive information" on the controller which should **receive** the information (i.e. the Secondary Wireless Controller)
2. Select "Send information" and either "Identical copy" or "Only system information" on the controller that is to **send** the information (i.e. the Master Wireless Controller).
3. Wait until transmission is completed and both the wireless controllers return to clock display.
4. If a transmission error occur. Please repeat from Step 1.

Considerations:

1. It is important to note that all information on the receiving controller will be deleted **before** any information is received.
2. Burglar deterrent and timer information is not copied to the secondary controller.
3. Slave Wireless Controllers **cannot** be used to add newly acquired or reset modules to the network.
4. If a secondary controller is added as one of the first 64 units, it will take up a module ID thus diminishing the number of units by one that can be controlled from the master controller.
5. If modules are moved physically it should be done as mentioned in 4.6.5 and the replication should be repeated.
6. New modules added to the network by the Master Wireless Controller are not automatically known by a secondary wireless controller. They have to be transferred from the Master Controller by the replication process.

4.6.5.1 SEND INFORMATION TO ANOTHER WIRELESS CONTROLLER
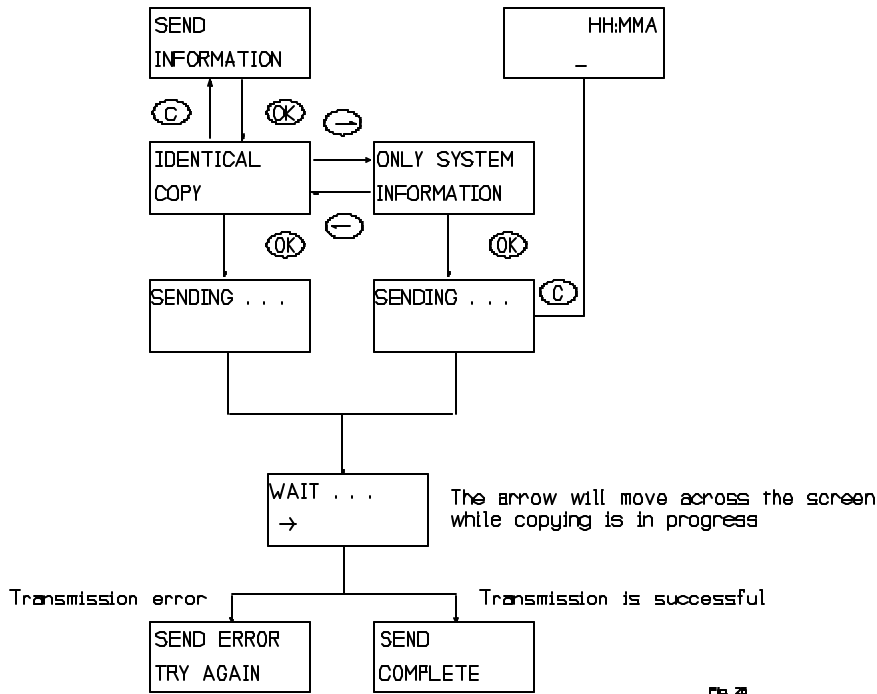
Fig 28

There are two options. If the user wants an exact copy of the master controller including groups, scenes, names and so forth, "Identical copy" should be selected. If the user wants to create groups, scenes and names from scratch "Only system information" should be selected. When sending is activated the master controller will wait for a secondary controller to respond to its module information broadcast.

4.6.5.2 RECEIVE INFORMATION FROM MASTER WIRELESS CONTROLLER

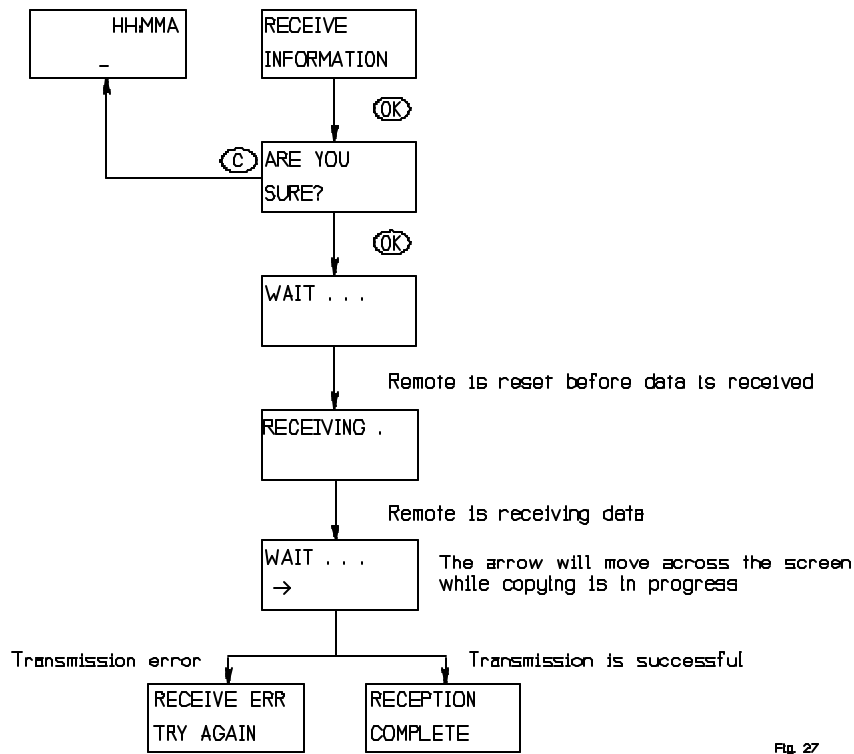The flow of the "Receive information" menu is shown below.

Fig. 27

4.6.6 RESETTING MODULES (INCLUDES PLUG IN LAMP, APPLIANCE AND WALL MOUNT)

If a module is to be moved to a new position or added to a new network, it has to be reset before doing so. This is done using this menu.
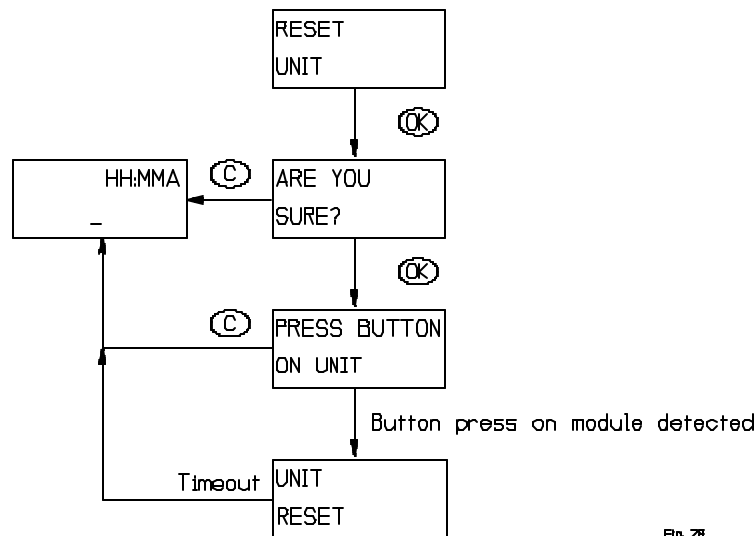

Fig. 28

4.6.7 RESET WIRELESS CONTROLLER

The Wireless Controller can be reset in two different ways, by "user data only" selection or "factory default". User data only will only reset groups, scenes and names. The Wireless Controller will still retain information about the modules that have been added to the network. A factory default reset should be used with extreme care. Factory default will clear the controller of all information, and it will clear groups, scenes, names and will delete all modules from the network.
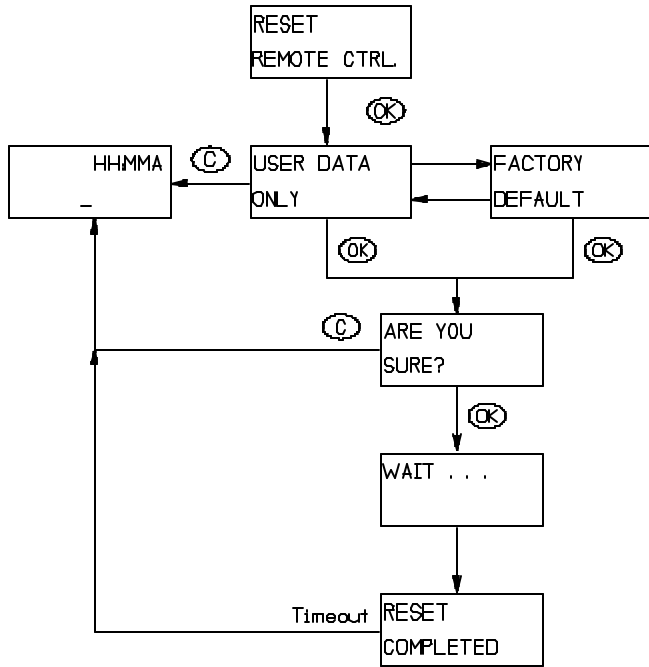
Fig. 29

5. OPERATION MODE

5.1 OPERATION DISPLAY
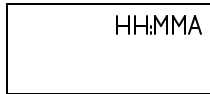
Fig. 30

When the clock is displayed the Wireless Controller is in operation mode. It is from this mode the known modules can be controlled through either groups or scenes.

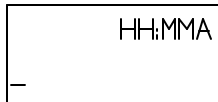### 5.1.1 SLAVE WIRELESS CONTROLLER INDICATION

Fig. 31

When an underscore is shown in the left bottom corner the Wireless Controller, it is a secondary Controller with the limitations as follows: Cannot reset unit and cannot add unit to network.

5.1.2 SCENE INDICATION.

From the operation mode press the scene prefix button "S". The display will change to:
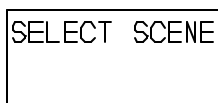

Fig. 32

This indicates that the next button press (number pad) will be used to control a scene (if any available).

5.1.3 LOW BATTERY INDICATION.

This message indicates that it is time to replace the batteries. It will go away when the batteries have been replaced.
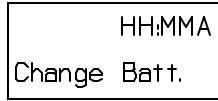
```
      HH:MMA
Change Batt.
```
Fig. 33

5.2 USING OPERATION MODE

Operation mode is the mode where the following display is indicated:
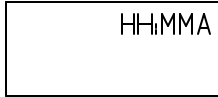
```
      HH:MMA
```
Fig. 34

This mode is also the idle mode to which the Controller returns after performing operations. Push OK or C button to activate display if asleep (blank).   In this chapter the functions available in operation mode will be described.

5.2.1 CONTROLLING GROUPS USING SPEED BUTTONS.

Groups are controlled by either using the buttons 1 through 6 or by using the navigation buttons ('<' or '>') to select the group that is to be controlled. Note that dimming a group never displays any failures that might have happened during transmission as does an ON/OFF command.

5.2.1.1 PRESSING A SPEED BUTTON BRIEFLY.

The buttons marked 1 through 6 are used for speed access to the first 6 groups or scenes. Pressing the speed button briefly will toggle the selected group on or off. Even if the Controller is powered down (display is off) a press on a speed button will toggle the group. The display will show the following message:
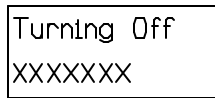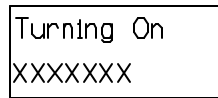
```
Turning On
XXXXXXX
```
```
Turning Off
XXXXXXX
```
Fig. 35

Alternatively, if the group is named, the name will be displayed:

```
TURNING ON
XXXXXXX
```
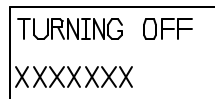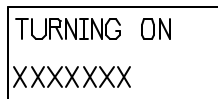```
TURNING OFF
XXXXXXX
```
Fig. 36

The text is displayed for a few seconds or until transmission is complete depending on which of these actions occurs last.

If no group of the selected number is defined, the following message will be shown for a few seconds:

```
BUTTON NOT
PROGRAMMED
```
Fig. 37

If for some reason the transmission fails, the following message will be shown until the user presses a button:
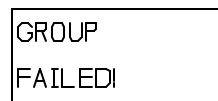
```
GROUP
FAILED!
```
Fig. 38

## 5.2.1.2 HOLDING A SPEED BUTTON DOWN.

Once a group is created on a speed button, it will start dimming when the speed button is held down.
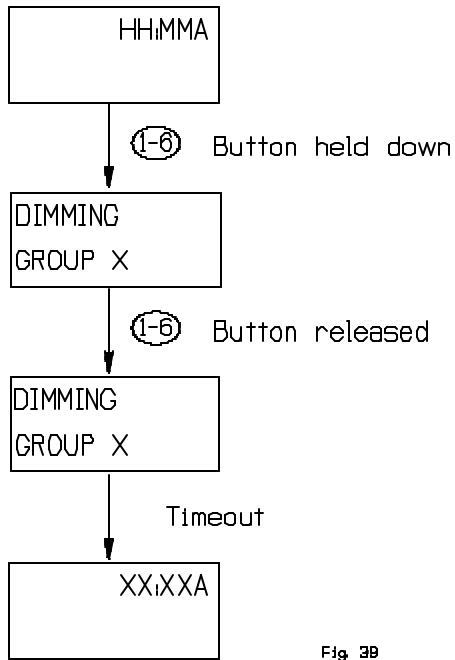
This figure illustrates the display during dimming:

```
            ┌──────────────┐
            │   HH:MMA     │
            │              │
            └──────┬───────┘
                   │   (1-6)   Button held down
                   ▼
            ┌──────────────┐
            │ DIMMING      │
            │ GROUP X      │
            └──────┬───────┘
                   │   (1-6)   Button released
                   ▼
            ┌──────────────┐
            │ DIMMING      │
            │ GROUP X      │
            └──────┬───────┘
                   │   Timeout
                   ▼
            ┌──────────────┐
            │   XX:XXA     │
            │              │
            └──────────────┘
                        Fig. 39
```

NOTE: If the group on the speed button is unused the user will be presented with the option to include a module when holding down a speed button. This is done with the following display:
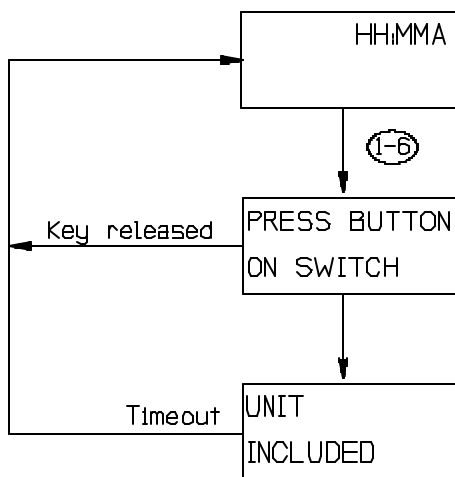
```
            ┌──────────────┐
     ┌─────▶│   HH:MMA     │
     │      │              │
     │      └──────┬───────┘
     │             │  (1-6)
     │             ▼
     │      ┌──────────────┐
  Key released│ PRESS BUTTON │
     ◀────────│ ON SWITCH    │
     │      └──────┬───────┘
     │             │
     │             ▼
     │      ┌──────────────┐
  Timeout   │ UNIT         │
     └────────│              │
            │ INCLUDED     │
            └──────────────┘
                        Fig. 41
```

5.2.2 CONTROLLING GROUPS USING NAVIGATION BUTTONS.

Another way to access groups is to use the navigation buttons ("<",">") from the operation state. This is the only way to control the groups from 7 to 64. Also note that it is only existing groups that show up when the user toggles through the list. If a group is named the name will be shown instead of the number. In order to switch a group ON or OFF the "OK" button is pressed briefly. If the "OK" button is held down the group will be dimmed and it will be possible to add module to the group being dimmed as mentioned in 5.2.1.2
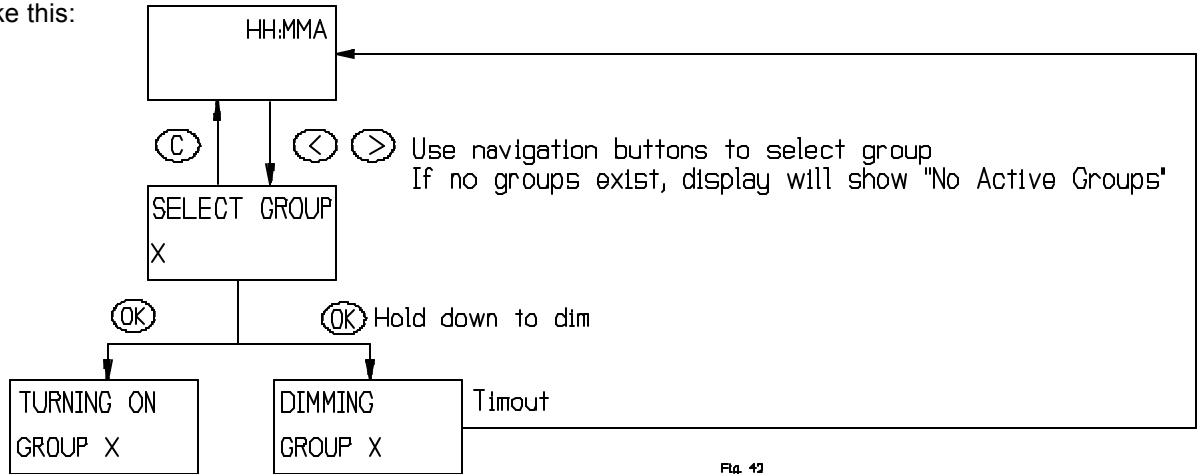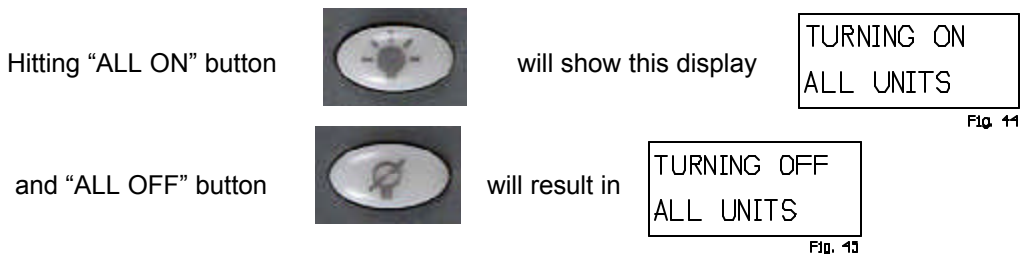
It looks like this:

Fig. 42
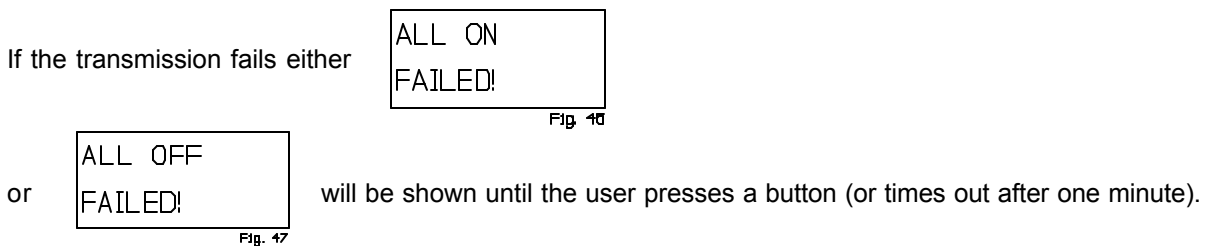
5.2.3 CONTROLLING SCENES

Scenes are accessed through the scene prefix button "S". The Wireless Controller will indicate that it is in scene selecting mode by the display shown in **5.1.2.**

When in this mode the **navigation** or **speed buttons** can be used to select a scene. Once a scene has been activated the Controller returns to group mode. Note that scenes can only be activated, not dimmed or deactivated. Unless the modules in the scene are also controlled individually (i.e. they are also configured as a single module in a scene), it is best to also set up an inverse scene of the same modules to turn them off taking advantage of the fact that scenes can include switched off modules. Note that setting a scene will never return a failure message.

5.2.4 ALL ON/ALL OFF

Hitting "ALL ON" button will show this display

```
TURNING ON
ALL UNITS
```
Fig. 44

and "ALL OFF" button will result in

```
TURNING OFF
ALL UNITS
```
Fig. 45

This display will be shown for the duration of the transmission, which for larger setups can be a while.

If the transmission fails either

```
ALL ON
FAILED!
```
Fig. 46

or
```
ALL OFF
FAILED!
```
Fig. 47

will be shown until the user presses a button (or times out after one minute).

---

6. OTHER INFORMATION

The Wireless Controller supports 64 HomePro modules. If the user adds Z-Wave devices other than HomePro to the network, those modules will use one of the HomePro modules identification, if they are assigned as one of the first 64 modules.

However since the protocol supports up to 232 modules it is possible to create a setup with 64 HomePro modules and numerous modules of other types. The HomePro modules must be added to the network before other types of modules are included. The Controller application will ignore the modules that are added after the 64th, but the protocol will make sure that they get a valid home/module identification and that they are used as repeaters if they support this functionality.

WARRANTY

For warranty and general product information visit our web site at www.act-solutions.com

Electrical	
Power	Two AA batteries
Signal	908.42 MHz
Range	Up to 100 feet (line of sight between the Wireless Controller and the closest HomePro Plug-In Lamp Module, Appliance Module, or Wall Switch).