## **Table of Contents**

Glossary of Terms

Safety Precautions

Installing software

Plugging in the USB stick and installing drivers

Starting the software for the first time

Entering your license key

Selecting the location nearest you

Setting up your network of devices

Adding devices to the network

Removing devices from the network

Removing or replacing broken devices

Controlling devices

Drawing a basic floor plan

Drawing and erasing rooms

Renaming rooms

Preventing/allowing changes

Creating scenes and groups

Adding scenes and groups

Modifying scenes and groups

Removing scenes and groups

Setting up schedules

Adding or modifying schedules for a scene or group

Viewing or modifying all schedules

**Additional Features** 

Joining a network

Receiving network updates

Adding a controller to the network

Resetting the USB stick

**Troubleshooting** 

Online support and user community

Federal Communications Commission Statement

Specification Information

Warranty Information

## **Glossary of Terms**

<u>Astronomic Function</u> – Allows the software to follow sunrise or sunset times. ThinkEssentials will automatically adjust schedules as daylight length increases or decreases without the need to be reprogrammed.

<u>Device</u> – Any Aspire RF or Z-Wave module, controller, or software, or an item connected to any module (for example, a lamp)

<u>Group</u> – Groups can include one or more devices in your network, allowing them to be turned on or off with the press of a button—or based on a schedule.

<u>Network</u> – All Aspire RF or other Z-Wave devices controlled by the software or by remote controllers operating in the same system. Each network has its own unique identification code to ensure that no one else can accidentally control your system.

<u>Scene</u> — Scenes can include one or more devices in your network, allowing each of them to be turned on or off or set to a different level with the press of a button--or based on a schedule.

<u>Schedule</u> – A timer-based event in the software that will activate a scene or turn on/off a group at a specified time of day, or at sunrise or sunset.

<u>Primary Controller</u> – The controller used to set up your devices or network. This can be a tabletop or handheld remote controller or it can be software.

NOTE: Only the Primary Controller can be used to add or remove devices from a network.

<u>Secondary Controller</u> – A controller containing network information about other devices within the network, included into the network by the Primary Controller. Secondary controllers cannot add or remove devices from the network.

## **Safety Precautions**

The following safety precautions are designed for your safety and comfort. You should follow all precautions and instructions.

The software is intended to be used in normal, household and limited commercial circumstances and is expressly not intended for use, has not been tested for use, and should not be used in applications where health or safety are dependent on the accurate and timely functioning of the software or in circumstances where a malfunction or error could result in the loss of valuable property.

You should not use this software in conjunction with wireless devices or with items connected to or powered by wireless devices which are not designed for unattended operation.

## Installing software

To install the software:

- 1. Insert the Aspire RF ThinkEssentials CD into your Windows 2000, XP, or newer computer.
- 2. The installer program should run automatically. If it does not, please run SETUP.EXE from the CD.
- 3. Follow the instructions provided by the installer program. Once complete, a shortcut to the Aspire RF ThinkEssentials program will be placed in your Start menu.
- 4. Install the drivers for the USB stick before running the software. The software requires the USB stick to communicate with a Z-Wave network.

### Plugging in the USB stick and installing drivers

To install the USB stick:

- Plug the USB stick into the supplied USB extension cable, and then plug the USB extension cable into an open USB port on your computer. Optionally, you may plug the USB stick directly into your computer, although this may reduce RF range.
- 2. Once you plug the USB stick into your computer, the Found New Hardware Wizard (or equivalent) will appear on your screen. Choose the "Install the software automatically (Recommended)" option and press Next.
- 3. A message may appear indicating that the drivers for the Cooper USB Z-Wave Controller have not been signed. This is not a requirement for the USB stick. Press "Continue Anyway".
- 4. Once your USB stick and drivers have been installed, press Finish.
- 5. For best performance, place the USB stick in an open area away from walls or other dense materials or metal.

## Starting the software for the first time

Once the software and USB stick have been installed, you can run Aspire RF ThinkEssentials on your computer. When you run the software for the first time, you will be presented with a few quick setup items.

### **Entering your license key**

The license key for your software is printed on a sticker on the back of the CD jacket accompanying its installation CD. When prompted for the license key, simply enter this number or code and then press the "Activate" button.

## Selecting the location nearest you

This copy of ThinkEssentials comes with a feature which enables you to activate scenes or turn on or off groups at sunrise or sunset. This is called the astronomic function.

To enable ThinkEssentials to automatically adjust the sunrise and sunset time, simply select your location during this step. Select your country first, then your state/province, and then your city. If your city does not appear in this list, select the city nearest you instead.

To change your location at any time, switch to the Advanced Settings tab in the software and select the new location there.

NOTE: Sunrise and sunset times are based on your location as well as your time zone and the current date and time. Please ensure that the correct date, time, and time zone are selected in the Windows® "Date and Time Properties" (accessible via the Control Panel).

## Setting up your network of devices

NOTE: Setting up your network refers to assigning devices to the USB stick's network. All devices must be assigned to the USB stick's network before any programming or remote control functions can be accomplished.

NOTE: Items (such as lamps) should be plugged into Aspire RF devices before adding devices to the network. These items should be turned to the ON position.

### Adding devices to the network

- 1. From the design pane, press the ADD DEVICE button. The software will ask you to press the button on the device to add.
- 2. Press and release the PROGRAM button on the device. If successful, the software will indicate that the device has been successfully added. If a failure is

- indicated instead, it will be necessary to repeat this step until the device is successfully added.
- Most devices will appear as icons in the ThinkEssentials software, typically near the lower-right corner. You may move these icons around by clicking and dragging them into open spaces or into rooms (see <u>Drawing a basic floor plan</u>, page ##).

Repeat steps 1 through 3 for each device you wish to add to the network.

NOTE: For your security, the USB stick must be within a few feet of the device to be able to add it to your network. If this is not possible, please set up your network with a portable remote controller and then copy this information to the USB stick (see **Joining a network**, page ##).

NOTE: To add a remote controller to the network, or to add any other device that does not have a PROGRAM button, press the ADD DEVICE button and then put the device into RECEIVE CONFIGURATION or REPLICATION RECEIVE mode.

NOTE: The process of adding a device to a Z-Wave network is often referred to as INCLUSION.

## Removing devices from the network

To remove a device from your network, follow the same procedure as <u>Adding devices</u> <u>to the network</u> (see page ##), but press the REMOVE DEVICE button instead of the ADD DEVICE button.

NOTE: You can also reset devices from other networks using the REMOVE DEVICE button. If the target device is part of another network, it will be reset instead of removed from your network.

NOTE: The process of removing a device from a Z-Wave network is often referred to as EXCLUSION.

## Removing or replacing broken devices

If a device is broken or has been removed from your system:

- 1. Press-and-hold the left mouse button or right-click on the broken or missing device's icon.
- 2. To remove the device from the network, select the REMOVE BROKEN DEVICE option.
- To replace the device with another device, select the REPLACE BROKEN DEVICE option. Then, follow steps 2 and 3 in the <u>Adding devices to the network</u> procedure (see page ##).

NOTE: You should remove devices from the network, such as Christmas light plug-in modules, before unplugging them for a period of time. For best results, this functionality should only be used in case of actual device failure.

## **Controlling devices**

To turn devices on or off, simply click on the icon of a device. Clicking repeatedly will typically toggle the device on and off.

In the case of window shades, clicking on the device's icon will typically open or close the shade.

Advanced functionality for a device can be accessed by pressing-and-holding the left mouse button while hovering over an icon or by right-clicking the icon. For example, lamp modules and dimmable light switches pop up a dimmer bar.

NOTE: Many types of devices have not been invented yet or are not known to the software, and may appear as question marks in the software interface. Additionally, some devices will not react when their icons are clicked on. There may be a free upgrade available online at http://www.controlthink.com which enables functionality for more types of devices.

### Drawing a basic floor plan

You may optionally draw a basic floor plan (room layout) in the software. This will allow you to organize your devices by room or floor, position in the room, etc.

## **Drawing and erasing rooms**

To draw a room, click the DRAW ROOMS button in the Design pane. This will enable DRAW ROOMS mode. To exit this mode, click the DRAW ROOMS button again.

Once in this mode, you may draw one or more rooms. To draw a room:

- Move your mouse pointer to the location in the open center area of the software interface where you would like to draw your room. This will be one corner of the room
- Press the left button on your mouse and then move your mouse diagonally to where the opposite corner of the room should be.
- To complete the room, release the left mouse button.
- When prompted, type a name for the room.

To draw a non-rectangular room:

- Draw the largest rectangular section of the room per the above instructions.
- To draw an additional segment of the room, press the left mouse button inside
  the room and then move your mouse diagonally to an empty area outside of
  the room.
- To complete the extension to the room, release the left mouse button.
- To erase unwanted sections of the room, use the ERASE mode (below).

To erase a room or rooms, or parts of a room or rooms, click the ERASE button in the Design pane. This will enable ERASE mode. To exit this mode, click the ERASE button again.

Once in this mode, you may erase part or all of one or more rooms. To erase:

- Move your mouse pointer to the location in the open center area of the software interface where you would like to begin erasing. This will be one corner of your erasing block.
- Press the left button on your mouse and then move your mouse over the area you would like to erase.
- When you have finished selecting the area you would like to erase, release the left mouse button.

To erase an entire room, you may also press-and-hold the left mouse button over that room or right-click the room and then select REMOVE ROOM from the pop-up menu.

### **Renaming rooms**

To rename an existing room, press-and-hold the left mouse button over the room or right-click the room and then select RENAME ROOM from the pop-up menu.

### Preventing/allowing changes

You may desire to lock your configuration to prevent accidental modifications or to prevent others from adding or removing devices from the network.

If the lock icon in the corner of the software interface is accompanied by the text CHANGES PREVENTED, you cannot add or remove devices, modify device or room layouts, or modify scenes or groups.

If the lock icon is accompanied by the text CHANGES ALLOWED, you can add or remove devices, modify device or room layouts, or modify scenes or groups.

To toggle between these two modes, simply click on the lock icon in the corner of the software interface or its accompanying text.

NOTE: Some options, such as ADD DEVICE and REMOVE DEVICE may still be unavailable when changes are allowed if your USB stick is a Secondary Controller in the network.

Only Primary Controllers can add or remove devices to or from a network.

## Creating scenes and groups

ThinkEssentials makes it easy to set up scenes and groups. These two features are very similar but are uniquely powerful.

Scenes activate a certain set of devices together, with each device changing to its own preset level. An example of this is "movie mode", where the living room lights dim to the OFF position, the living room blinds close, and the kitchen light turns on to 20% for a bit of background light. Other popular scenes include "romantic", "dinnertime", etc. Be creative!

Groups turn on or off a set of devices together. The devices do not change to preset modes, but instead all of them turn on or off. This is very useful for turning on porch or holiday lights or outdoor lighting at sunset, and turning them off again around midnight, as one example.

## Adding scenes and groups

To add a scene or group:

- 1. Click the ADD SCENE or ADD GROUP button, respectively. This button is found at the bottom of the list of scenes or groups.
- 2. The software will prompt you to name the scene or group. Enter a name, and then press the button to continue. You may also be presented with additional instructions.
- 3. To include devices into this scene or group, simply click on the icon of the device. The device's icon will be circled on the screen indicating that it is now part of the scene or group.
  - a. When including devices into a scene, the device's level will be recorded for use when the scene is activated. To change the device's desired level for the scene, press-and-hold the left mouse button or right-click on the device's icon and utilize the pop-up options.
  - b. There are two special scenes built into the scenes tab: ALL ON and ALL OFF. These scenes will turn the selected devices to the ON or OFF position when activated, and changing these scenes will affect the ALL ON and

- ALL OFF features of all remotes in the network. Changing the device's current level will not be reflected in these scenes.
- c. When including devices into a group, the current level of the device is not relevant. Devices in a group all turn on or off together.
- 4. To record the scene or group, press its button in the Scenes or Groups pane. The highlight on the button will then go away.

## Modifying scenes and groups

To modify a scene or group:

- 1. Press-and-hold the left mouse button or right-click the button for the scene or group you wish to modify.
- 2. To rename the scene, select the Rename Scene or Rename Group option.
- 3. To modify a scene, select the Modify Scene or Modify Group option. Follow steps 3 and 4 in **Adding scenes and groups** to select or deselect devices and rerecord the scene or group.

## Removing scenes and groups

To remove a scene or group:

- 1. Press-and-hold the left mouse button or right-click the button for the scene or group you wish to modify.
- 2. Select the REMOVE SCENE or REMOVE GROUP option respectively.

## Setting up schedules

ThinkEssentials can help you save energy, make life more convenient, or increase the security of your home by automatically activating scenes or groups at certain times of the day or at sunrise or sunset. These schedules can be activated or deactivated at any time, and can occur on one or more days of the week.

# Adding or modifying schedules for a scene or group

To modify the schedule for a scene or group:

- 1. Press-and-hold the left mouse button or right-click the button for the scene or group.
- 2. Select the MODIFY SCHEDULE option.
- 3. To add a new schedule item, click on the CLICK TO ADD SCHEDULE ITEM pull-down. To modify an existing schedule item, locate the item in the list. If you cannot locate the item, check the "Show All Schedules" checkbox in the lower-left corner.
- 4. If the desired scene or group is not already selected, select it now. In the case of groups, select whether to turn the group on or off.
- 5. Click on the days of week when the schedule item should occur.
- 6. Click on the time pull-down near the right to change the time of day when the schedule item should occur. You may also choose sunrise or sunset.
- 7. To enable the schedule item, make sure that the checkbox on the left side is checked. To disable the schedule item, uncheck its checkbox.
- 8. When done, close the Schedules pop-up window.

NOTE: You may choose to let your computer go to sleep (into standby mode) when it is not used for a period of time. ThinkEssentials will attempt to wake your computer from standby when a schedule item should occur. If your computer has trouble waking from standby mode, disable standby on your computer.

NOTE: The sun does may not rise or set on certain days for locations in the Arctic and Antarctic circles. On these days, any schedule items assigned to sunrise or sunset may not be activated.

#### Viewing or modifying all schedules

To view or modify all schedules:

- 1. Press-and-hold the left mouse button or right-click the button of any scene or group.
- 2. Check the "Show All Schedules" checkbox in the lower-left corner of the Schedules pop-up window.

NOTE: To restrict the Schedules pop-up window to show only schedule items for the scene or group selected, uncheck the "Show All Schedules" checkbox.

NOTE: From time to time, the ThinkEssentials icon may appear in the Windows system tray, typically located in the bottom-right corner of your display screen. You may also right-click this icon and select "Modify Schedules..." when it is visible to view or modify all schedules.

#### **Additional Features**

Aspire RF ThinkEssentials allows your USB stick (and thus your computer) to join an existing network, or to add another controller to its network.

### Joining a network

To join an existing Z-Wave network:

- 1. Activate the REPLICATION SEND mode on your Primary Controller. This option may also simply be referred to as ADD DEVICE.
- 2. Switch to the ADVANCED SETTINGS tab, and then press the JOIN EXISTING NETWORK button.

The controller will then automatically send the USB stick a full listing of all the devices in the network as well as placement and routing information. The software will indicate if the process was successful. If it was not successful, it will be necessary to repeat this step.

NOTE: If the USB stick joins an existing network and becomes a Secondary Controller, you cannot use the software to add or remove devices from the network.

NOTE: Any time you add or remove a device using the Primary Controller, the software and other Secondary Controllers should be updated. See **Receiving network updates** (see page ##).

NOTE: The process of joining a network is often referred to as RECEIVE CONFIGURATION or REPLICATION RECEIVE mode. The overall process is often called CONTROLLER REPLICATION.

#### Receiving network updates

When you add or remove devices using the Primary Controller, those changes will generally not be reflected in the software. To update your USB stick and the software:

- 1. Activate the REPLICATION SEND mode on your Primary Controller. This option may also simply be referred to as ADD DEVICE.
- 2. Switch to the ADVANCED SETTINGS tab, and then press the RECEIVE NETWORK UPDATE button.

The controller will then automatically send the USB stick a full listing of all the devices in the network as well as placement and routing information. The software will indicate if the process was successful. If it was not successful, it will be necessary to repeat this step.

NOTE: Any time you add or remove a device using the Primary Controller, the software and other Secondary Controllers should be updated by repeating this process.

NOTE: The process of receiving network updates is often referred to as RECEIVE CONFIGURATION or REPLICATION RECEIVE mode. The overall process is often called CONTROLLER REPLICATION.

## Adding a controller to the network

To add another controller to your network, follow the same procedure as **Adding devices to the network** (see page ##), but put the target controller into RECEIVE CONFIGURATION or REPLICATION RECEIVE mode.

NOTE: The process of adding a controller to a Z-Wave network is often referred to as SEND CONFIGURATION or REPLICATION SEND mode. The overall process is often called CONTROLLER REPLICATION.

## Resetting the USB stick

WARNING: If your USB stick and software are the Primary Controller in a network, and you reset your USB stick, you will no longer be able to add or remove devices from your network without recreating the entire network.

To reset the USB stick:

1. Switch to the ADVANCED SETTINGS tab, and then press the RESET USB STICK button.

NOTE: If the USB stick is serving as a secondary controller, remove it from the network by pressing the RECEIVE NETWORK UPDATE button and instructing the Primary Controller to remove the USB stick. This may be referred to as REMOVE DEVICE.

NOTE: If you reset your Primary Controller before removing all the devices from your network, you must reset each of the devices (see **Removing devices from the network**, page ##) before adding devices to the network again.

## **Troubleshooting**

#### Problem:

• I cannot add or remove devices to or from my network. The ADD DEVICE and REMOVE DEVICE buttons are faded out (dimmed).

### Solution:

 The USB stick might be a Secondary Controller. Only a Primary Controller may be used to add or remove devices to or from a network. Use the Primary Controller to add or remove devices, and then update your USB stick and software (see <u>Joining a network</u>, page ##).  The software may be in CHANGES PREVENTED mode. Click on the lock in the corner of your screen until the text CHANGES ALLOWED appears.

#### Problem:

• I cannot add or remove a device to or from my network. I press the PROGRAM button on the device but the software never responds.

### Solution:

- If you cannot successfully add a device, try removing it from your network first using the REMOVE DEVICE button. Even if it is not in your network, this operation will reset the device. Once the device has been reset, try adding it again.
- For your security, the USB stick must be within a few feet of the device to be able
  to add it to your network. If this is not possible, please set up your network with a
  portable remote controller and then copy this information to the USB stick (see
  Joining a network, page ##).

#### Problem:

• I cannot add a device to my network. I cannot find its PROGRAM button.

#### Solution:

 Refer to the product's instructions. For many light switches, turning on or off the switch will activate its PROGRAM button. For remote controllers, the PROGRAM button is often replaced with RECEIVE CONFIGURATION or REPLICATION RECEIVE mode.

#### Problem:

• I tried to reset a device, but another device was removed from my network instead.

#### Solution:

• The device had not been properly reset previously, and another device with its assigned ID was mistakenly identified. Reset the device again if necessary, and then re-add the device which was mistakenly removed.

## Problem:

• I cannot join another network. I press JOIN EXISTING NETWORK but the process never starts.

#### Solution:

To join a network, or to receive a network update, the USB stick must be within a
few feet of the controller adding it to the network or sending the update.

#### Problem:

• I joined a network instead of adding another controller to my network. Now, neither the software nor the controller can control anything.

#### Solution:

You have accidentally overwritten your Primary Controller with a blank network.
 Reset both controllers and all devices in your network, and set up your network again.

#### Problem:

• I cannot control a device in my network, or am experiencing intermittent device failures or sluggishness controlling my devices.

### Solution:

- Check to make sure that there is power supplied to the device.
- For plug-in modules, ensure that the outlet is not a switched outlet, or that the outlet is switched on.
- For devices with no neutral connection (such as dimmers), ensure that the attached load (such as a light bulb) is not burned out.
- For best performance, attach the USB stick to the USB extension cable included in this package. Then, place the USB stick in an open area away from walls or other dense materials or metal.

#### Problem:

• I moved a device, and now I cannot control it.

#### Solution:

 Remove the device from your network, and then add it while it is powered in its new location.

## Problem:

• I am setting up a scene, but the software will not let me add a particular device to the scene.

#### Solution:

- If the device's icon is covered by a red circle-slash (i.e. "broken" symbol), follow the troubleshooting steps for a broken device and then select the device again.
- Some devices do not support the functionality required to add them to a scene.

#### Problem:

• I have set up a schedule for a group or scene, but the schedule is not being activated on time or is not being activated at all.

## Solution:

- Check to make sure that the schedule item is enabled (by checking the check box to the left of the scene), and that it is enabled on the desired days of week (by clicking on the desired days of the week between the event name and the event time).
- Check to make sure that your computer's date, time, and time zone are set correctly. You can access these through "Date and Time Properties" in the Windows Control Panel.
- Your computer must be turned on for the schedule items to occur on time.
   ThinkEssentials will also attempt to wake your computer out of low-power standby mode, but some computers do not reliably wake up from standby. If your computer does not wake reliably from standby mode, ensure that it is always powered on so that the schedules work properly.

### Online support and user community

Support for the software is available through peer support forums at the following website:

http://forums.controlthink.com

### Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1: This device may not cause harmful interference, and
- 2: This device must accept any interference received, including interference that may cause undesired operation.

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.
- 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.

### FCC CAUTION:

Any changes or modifications not expressly approved by Cooper Wiring Devices could void the user's authority to operate the equipment.

# **Specification Information**

<to be completed by Cooper>

### **Warranty Information**

<to be completed by Cooper>

Copyright © 2006 Cooper Wiring Devices or Cooper Lighting, All Rights Reserved Copyright © 2005-2006 ControlThink LC, All Rights Reserved

## **FCC Warning:**

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

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.
- —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.

Modifications not authorized by the manufacturer may void users authority to operate this device.