SPRINT FONSAFE INSTALLATION MANUAL

Sprint FONSAFE™

HOME SECURITY SYSTEM & CONTROL CENTER

AlarmCollege.com

FŌNSAFE™

Installation Manual

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Contents

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Before you start...

... take the time to familiarize yourself with the information in this manual.

This manual will lead you through the installation process, step by step. It is important that you follow these instructions in sequence. Start with this section. Each new section builds on the earlier section(s); therefore, be sure to read each section completely before moving on to the next one.

Follow the instructions in this Installation Manual carefully.

This will help ensure that you install the system correctly.

Questions?
Call the Sprint Support Line: 1-800-854-5666.

SIMPLE TO INSTALL AND PROGRAM

You'll find that this system is simple to install and program. This Installation Manual will help you plan where to place the system components and how to install them.

Don't worry about programming the system -- we've made that easy, too! Since the system uses voice technology to "speak," the Master Control Unit (MCU) will actually tell you how to control it, prompting you through each programming step.

The *Quick Guide* to programming the system at the back of this manual summarizes these instructions. You may want to keep it handy for quick reference.

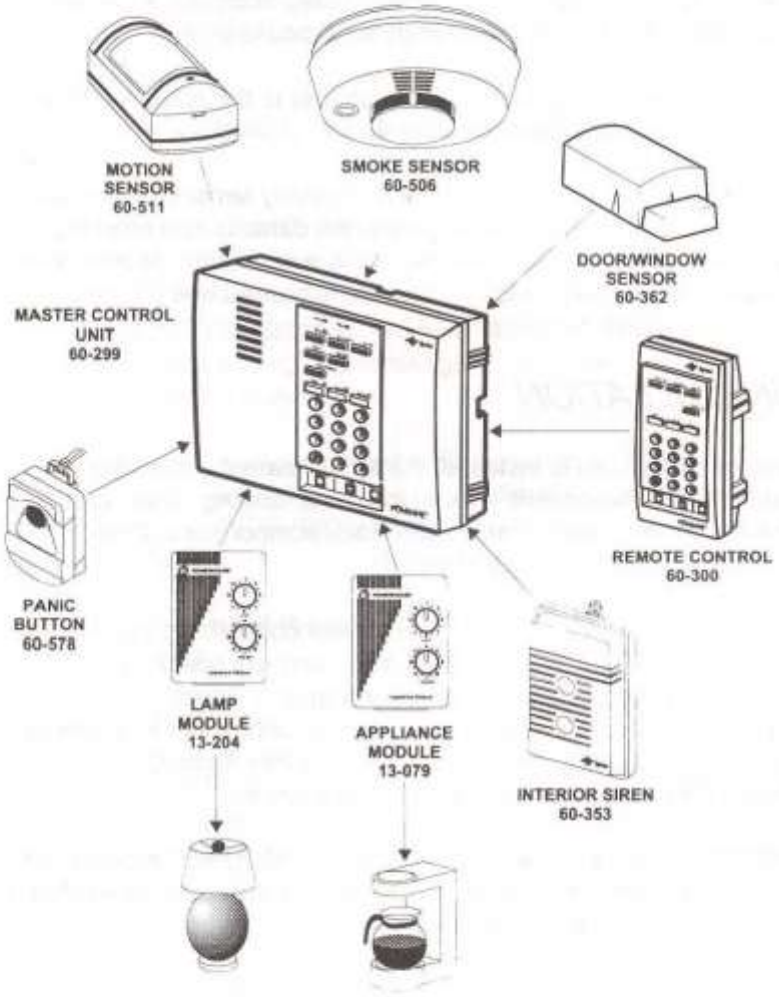
SYSTEM COMPONENTS

This security system may include some, or all, of the following components:

- **Remote Control**
- **Door/Window Sensor**
- **Motion Detector**
- **Smoke Detector**
- **Panic Button**
- **Lamp Module**
- **Appliance Module**
- **Interior Siren**

The total number of sensors and detectors in the system and the quantity of each type will depend on the security requirements. The system can be customized to provide the most effective security for individual needs.

FŌNSAFE *Security System*



HOW THE SYSTEM WORKS

The MCU monitors sensors and detectors placed around the home, via radio waves and controls Lamp Modules, Appliance Modules, and the interior siren through house wiring.

The system verbally alerts your customer to the status of intrusion emergencies, fires, and break-ins.

In intrusion emergencies, the MCU instantly senses the problem (in a personal intrusion emergency, the panic button must be pushed). If the system is connected to a monitoring bureau, the MCU automatically calls the monitoring bureau and communicates the alarm message.

INSTALLATION

When the system is installed, the MCU "learns" information about each component -- room locations, arming levels, and other specific details that identify each component and help the MCU monitor the home's condition.

Once installation is complete, the owner controls the system through the MCU. The MCU will also carry out commands received from the remote control or from any TouchTone™ phone outside the home. If the system is connected to a special phone jack (RJ31X jack), TouchTone phones located in the home may also be used to control the system.

NOTE: Failure to install and program the MCU and accessories in accordance with UL instructions voids the Listing Mark of Underwriters Laboratories, Inc.

PHONE CONTROL OF THE SYSTEM

We strongly recommend the installation of an RJ31X jack. The RJ31X jack is required in UL Listed systems.

An RJ31X jack allows the owner (and the system) to do the following:

- Use any TouchTone phone located in the home to control the system.
- If the system is connected to a monitoring bureau, the RJ31X jack allows for the immediate transmission of an intrusion emergency message from the MCU to the monitoring bureau.

For example, if the owner is on the phone when an alarm occurs, the RJ31X jack allows the MCU to immediately seize the phone line and send an INTRUSION EMERGENCY message to the monitoring bureau.

This will not occur if the system is connected to an RJ11 standard jack.†

If the system is connected to an RJ11 jack and the owner is on the phone when an alarm occurs, the MCU will attempt to send an INTRUSION EMERGENCY message to the monitoring bureau. However, since the phone line is in use, the MCU will not be able to make the connection until the owner hangs up the phone.

† **An RJ11 standard jack is not intended for use in a UL Listed system.**

MINIMUM CONFIGURATIONS FOR UL LISTED SYSTEMS

HOUSEHOLD FIRE WARNING

1. 60-299 Master Control Unit
2. 60-506 Smoke Detector
3. 60-353 Interior Siren

HOUSEHOLD BURGLARY

1. 60-299 Master Control Unit
2. 60-362 Door/Window Sensor
3. 60-353 Interior Siren

NOTE: If off-premises monitoring is desired, the MCU shall be configured to transmit to the listed ITI CS-4000 Central Station Receiver.

The Basics: Installation Overview

This manual is designed to guide you through the installation process and to help ensure that the system is installed correctly. As you read on, you'll find that the manual leads you through the following steps:

- **Planning** *(Section 3)*
- **Programming** *(Section 4)*
- **Positioning & Pre-Testing** *(Section 5)*
- **Installation & Testing** *(Section 6)*

Each section starts in the same way, with a quick overview of the steps you'll complete in that section, as well as a list of the components, tools, and supplies you'll need.

For instance, in this section, *Installation Overview*, you should complete the following steps:

1. **ASSEMBLE** the tools you will need to install the system.
2. **READ** *Learning about the MCU.*

What You Need:

- **Installation Tools**

Be sure to complete these two steps before you move on to Section 3, *Planning the System.*

Step 1: Assembling the tools and supplies you'll need

You will need the following tools to install the system:

- hammer
- flat head screwdriver
- phillips head screwdriver
- nail or awl
- pencil
- rubber bands
- tape
- Post-it™ Notes
- electric drill (optional)
- 3/16" drill bit (optional)
- 1/8" drill bit (optional)

Batteries

To simplify the installation process, the batteries needed to operate most of the components in the system are already in place.

You must connect the batteries in three of the components -- the interior siren, smoke detector, and MCU. You will find out how to correctly place and connect these batteries in Section 4, *Programming the System.* All other batteries are already connected.

Replacement Batteries

- **MCU:** 6V, 3.2A-h sealed lead acid battery
- **60-506:** Refer to detector marking
- **60-300, 60-362 60-511:** Tadiran TL5151 and Saft LS14250SCBA
- **60-353:** Eveready 522, Duracell MN-1604

Additional Features

After you have installed the system, you may want to read Section 7, *Additional Features*, which describes different ways to customize the system.

Help

If you run into a problem:

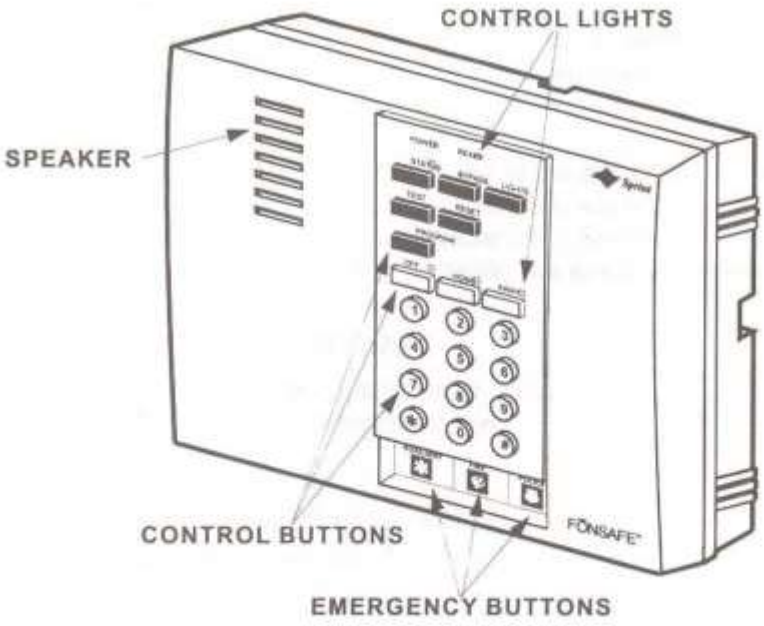
- **Check Appendix A, *Troubleshooting* in this manual.**
- **Call the Sprint Support Line: 1-800-854-5666.**

Step 2: Learning about the MCU

The MCU controls the entire system. It monitors and controls all the components -- sensors and detectors -- that have been placed around the home.

The control buttons and lights on the MCU correspond to different system functions. They are used to inform users about the condition of the system and to assist them in controlling it.

The charts on the following pages will help you identify these control buttons and lights. You may want to look the charts over to familiarize yourself with the MCU now, and refer to them later when you program the system.



MCU Control Buttons

Whenever you press a control button, the MCU will speak to you. It will tell you information about the condition of the system (system status) or prompt you through the key sequences you need to perform to activate its various features and functions.

BUTTON	FUNCTION
OFF, HOME & AWAY	Allow you to arm and disarm the system.
BYPASS	Allows you to disable open or troubled sensors when you arm the system.
STATUS	Tells you the current arming level of the system and if trouble conditions have occurred.
LIGHTS	Allows you to manually control any Lamp Modules connected to the system.
RESET	Allows you to remove status messages from the MCU memory. You can also use it to exit program and test modes.
PROGRAM	Allows you to set up and customize the system.
AUXILIARY, FIRE, POLICE	Allows you to manually signal alarms to the monitoring bureau, if the system is monitored.
TEST	Allows you to test system functions.
0 - 9, *, #	Data Entry and Control.

MCU Control Lights

The MCU control lights show you, at a glance, the current status of the system. The chart below describes each light, as well as what each light condition indicates about the system.

NAME	COLOR	CONDITION	INDICATES
POWER	GREEN	ON	AC power OK.
		OFF	No power to system.
		FLASHING	System powered by battery.
READY	GREEN	ON	System ready to be armed.
		OFF	Open sensor(s).
		FLASHING (1 second on, 1 second off)	Phone line seized by MCU for phone test or dialing monitoring bureau.
STATUS	YELLOW	OFF	Normal condition.
		FLASHING	Trouble or alarm condition in status queue.
OFF	GREEN	ON	System armed to OFF arming level.
HOME	RED	ON	System armed to HOME arming level.
		FLASHING (1 second on, 1 second off)	Exit Delay.
AWAY	RED	ON	System armed to AWAY arming level.
		FLASHING (1 second on, 1 second off)	Exit Delay.

NOTE: When the MCU is on backup battery, any LEDs that would normally be on will flash infrequently to conserve battery power.

The Basics: Planning the System

To plan the system layout, follow the step-by-step instructions below. Be sure to complete these three steps before you move on to programming:

1. **SELECT** a location for each component.
2. **LABEL** each component with the room location chosen for it.
3. **FILL OUT** the *Installation Planning Worksheets* in Appendix B.

What You Need:

- **Post-it Notes**
- ***Installation Planning Worksheets* (located in Appendix B).**
- **Pencil**

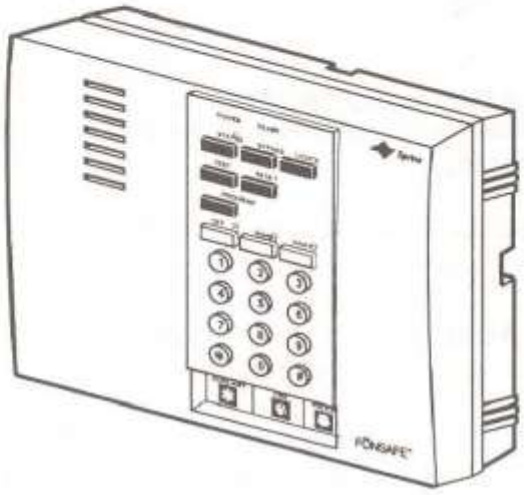
Step 1: Locating System Components

The system may include some or all of the components described on the following pages.

Use the guidelines in step 1 to familiarize yourself with the various components and to select a room location for each one. Once you have decided approximately where to place each component, you will be ready to move on to step 2.

Master Control Unit (MCU)

(60-299)



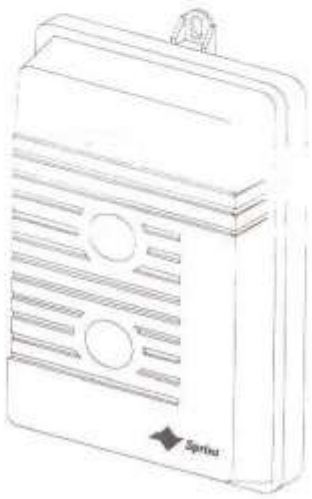
Locate the MCU so it is:

- convenient to operate
- near the center of the home
- near a telephone jack (RJ31X preferred)
- plugged into an outlet not controlled by a switch
- within 50 feet of sensors
- on the same floor or above where most of sensors are located

The MCU may be mounted vertically, on a wall or in a closet, or placed horizontally on a table or countertop. Be sure to select a location that is convenient to reach, but one that does not draw attention to the MCU.

Interior Siren

(60-353)



Locate the interior siren in a central location where it will:

- alert the family in an intrusion emergency
- scare off intruders

Some suggested locations are:

- a center hallway
- near bedrooms

Motion Detector

(60-511)

Select a central location for the motion detector where a burglar would normally pass to reach valuables.

A pet can trip a motion detector as easily as an intruder. Therefore, locate the motion detector in an area where a pet cannot enter, or use a pet lens.

Some suggested locations are:

- a center hallway
- master bedroom
- dining room

If you locate the motion detector to protect a door used to enter and leave the home, you MUST protect that door with a door/window sensor, in addition to the motion detector.

Smoke Detector

(60-506)

Locate Smoke Detector(s):

- near sleeping areas
- on each floor of the home

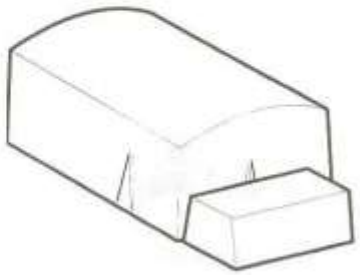
Avoid:

- attics
- kitchens
- above fireplaces
- areas with temperature extremes
- dusty locations

For mounting method and installation locations, refer to the instructions provided with the detector.

Door/Window Sensors

(60-362)



Locate door/window sensors on:

- exterior doors
- exterior windows:
  - first floor windows
  - basement windows
  - any window easily reached from outside
- interior garage doors
- doors to areas containing valuables:
  - master bedroom door
  - closet doors

Remote Control

(60-300)

The remote control can be:

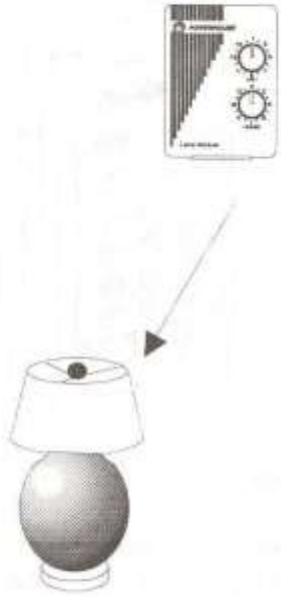
- carried from room to room
- placed in a purse or attache case
- taken with the owner
- left on a table or nightstand
- mounted on the wall

A wall bracket provides a convenient place to hold the remote control when not in use.

NOTE: The fire panic function on the remote control is supplementary only.

Lamp Modules

(13-204)



Select wall outlets where lamps can:

- provide emergency lighting in case of fire
- give home a lived-in look
- alert neighbors that an alarm has been triggered and a break-in may have occurred

NOTE: Lamp Modules are for supplementary use only.

CAUTION: LAMP MODULES CANNOT BE USED TO CONTROL APPLIANCES.

Appliance Modules

(13-079)

Select outlets for Appliance Modules to control an appliance of less than 500 watts.

Some examples of appliances are:

- coffee maker
- radio/stereo system
- slow cooker

Appliance Modules can also be used to control lamps.

NOTE: Appliance Modules are for supplementary use only.

Step 2: Labelling Components

The next step is to label each component, using a Post-it Note, with a Location Name and a corresponding Location Number.

Place the appropriate Post-it Notes on the components to be used. The Post-it Notes will guide you during programming and can be removed after installation, once you have placed each component in its planned location.

Once you have labelled each component, you will be ready to move on to step 3.

Location Description	Number	Location Description	Number	Location Description	Number
No description	0	Living Room	10	Downstairs	20
Bedroom 1	1	Dining Room	11	Hall	21
Bedroom 2	2	Guest Room	12	Front Hall	22
Bedroom 3	3	Laundry Room	13	Kitchen	23
Bedroom 4	4	Utility Room	14	Office	24
Master Bedroom	5	Front Door	15	Basement	25
Child's Bedroom	6	Back Door	16	Garage	26
Guest Bedroom	7	Garage Door	17	Attic	27
Bathroom	8	Basement Door	18	Closet	28
Master Bathroom	9	Upstairs	19	Den	29

Step 3: Filling Out the Installation Planning Worksheets

Your last step is to fill out the *Installation Planning Worksheets*, following the instructions in this section.

Worksheet A: Sensor/Detector Chart

1. List the Components

Write the name of each component to be used in column 2. Be sure to list the remote control. Do NOT list the MCU, the interior siren, or any Lamp or Appliance Modules.

You can list components in any order on the worksheet. If you are installing two or more of any component, list each one on a separate line.

If you are installing a door/window sensor, list the sensor code after you list the sensor/detector type in column 2. Refer to the *Sensor Codes Chart* in Appendix B for a list of sensor codes.

2. List the Location Description & Number

For each component that you labelled, write the Location Description in column 3 and its Location Number in column 4.

Worksheet A: Sensor/Detector Chart (sample)

1	2	3	4	5	6
Sensor Number	Sensor/ Detector Type	Location Description	Location Number	Arming Level HOME/ AWAY	Delay 1 or 2
1					
2					
3					
4					

3. Select Arming Levels

For each door/window sensor on your list, write HOME or AWAY in column 5, following the guidelines below. (Door/window sensors are the only components **without** default arming levels.)

HOME
Selecting the HOME arming level provides perimeter protection when the owner is home.

Generally, door/window sensors on doors and windows that open to the outside of a home should be armed to HOME. These doors and windows will be protected when the system is armed to HOME.

AWAY
Selecting the AWAY arming level provides the highest level of protection where all door/window sensors are active and will cause alarms if tripped.

Inside the home, on doors that lead to a basement or closet, sensors should be armed to AWAY. Arming a door/window sensor to AWAY allows the owner to open and close that door when home (and system is armed to HOME or the system is OFF) without tripping an alarm. However, once the owner leaves and the system is armed to AWAY, anyone opening that door will set off the alarm.

In summary:

DOORS/WINDOWS THAT...	ARMING LEVEL
Open to outside	HOME
Lead to areas inside home (e.g., basement, closet)	AWAY

4. Select Delay Options

Select a Delay Option for each door/window sensor on the list. In column 6, write 1 for Delay or 2 for No Delay.

The Delay Option gives the owner time to enter or exit the home through an exterior door before an alarm goes off, when the system is armed.

IF SENSOR IS LOCATED	AND YOU	SELECT
On an EXTERIOR door	Need time to arm/disarm system	1
On an EXTERIOR door	DON'T need time to arm/ disarm system	2
On any other door or window		2

5. Decide if you need to fill out Worksheets B and C

Choose one of the options below:

Basic If you want to set lights and appliances to go on and off at preset times or control them with the MCU, remote control, or TouchTone phone:

- Continue *Planning* with step 6.

Custom If you want to customize the system so that the status of a lamp or appliance can be checked, set on/off times for lamps and appliances, or set the motion detector to turn on a lamp when someone passes by, in addition to the basic features above:

- Fill out Worksheets B and C of the *Installation Planning Worksheets*. Turn to Section 7, *Additional Features*, for instructions.

6. Select Lamp and Appliance Module Modes

If you don't need to fill out Worksheets B and C of the Installation Planning Worksheets to use Lamp or Option/Appliance Modules:

- Select the Lamp or Appliance Mode from the following charts.
- Set the numbered dial on the module to the Light (Option) Number you selected.
- Set the letter dial for lamps and appliances (A is the default for the lights housecode and B is the default for the options housecode).
- Plug the lamps and appliances into the appropriate modules (see Section 5).

LAMP MODULES

Select a Lamp Module Mode for each lamp that will be controlled by the system.

LAMP MODULE MODE	IF YOU WANT TO TURN LAMP(S) ON AND OFF	LIGHT NUMBER
Untimed Light	Manually using the MCU, remote control, or TouchTone phone.	1 or 2
Motion Detector Light	Automatically when someone enters the room between 6 p.m. and 7 a.m. and passes by the motion detector.	3 or 4
Timed Light	At preset times: ON at 5 p.m., OFF at 10 p.m. ON at 6 p.m., OFF at 11 p.m. ON at 7 p.m., OFF at 12 Mid.	 5 6 7
Entry/ Exit Light	During Entry/Exit delay.	8
Alarm Memory Light	As a warning that an alarm was tripped (lamp will remain ON after siren shuts off).	9

NOTE: All lights can be manually turned on and off by pressing LIGHTS and the Light Number, regardless of a light schedule, motion detector usage, entry/exit delay, or alarm memory.

HINT: It is possible to set more than one lamp or appliance to the same setting, as in the following examples:

If two lamps are set to Light Number 5, both lamps will go ON and OFF at the same time.

If the radio and the coffee maker are both set to Option Number 6, both appliances will turn ON and OFF at the same time.

OPTION/APPLIANCE MODULES

Decide if appliances will be timed or untimed. Select an Appliance Module Mode for each appliance to be controlled by the MCU.

OPTION APPLIANCE MODULE MODE	SELECT OPTION NUMBER
UNTIMED Turn ON as needed using: • Master Control Unit • Remote Control • TouchTone phone	1, 2, or 3
TIMED Select to turn ON and OFF at pre-selected times	4 through 9

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The Basics: Programming the System

In this section you will program the MCU to communicate with the components of the system, by following the instructions for these four steps.

1. **INSTALL** the interior siren.
2. **INSTALL** the smoke detector battery.
3. **POWER UP** the MCU.
4. **PROGRAM** components.

What You Need:

- **All system components, labelled with their planned locations**
- **Two, 9-volt batteries (from smoke detector box)**
- **Screwdriver**
- **Rubber bands**
- **Completed *Worksheet A: Sensor/Detector Chart* from Appendix B.**

"LEARNING" COMPONENTS

In order to communicate with the components in the home, the MCU must know the arming levels and delays for each component. To do this, it must "learn" this information about each of the components. You will program the MCU with this information.

Programming the MCU is simple. When you plug it into the wall outlet where it will be located, the MCU will begin to speak to you, prompting you at each programming step.

Be sure to have the completed *Worksheet A: Sensor/Detector Chart* before you begin.

Step 1: Installing the Interior Siren

Refer to the *Installation Instructions* packaged with the interior siren for installation procedures.

Step 2: Installing the Smoke Detector Batteries

1. Twist the base of the detector to remove the mounting bracket from the detector.
2. Insert the two, 9-volt batteries in the battery compartments in the back of the smoke detector.

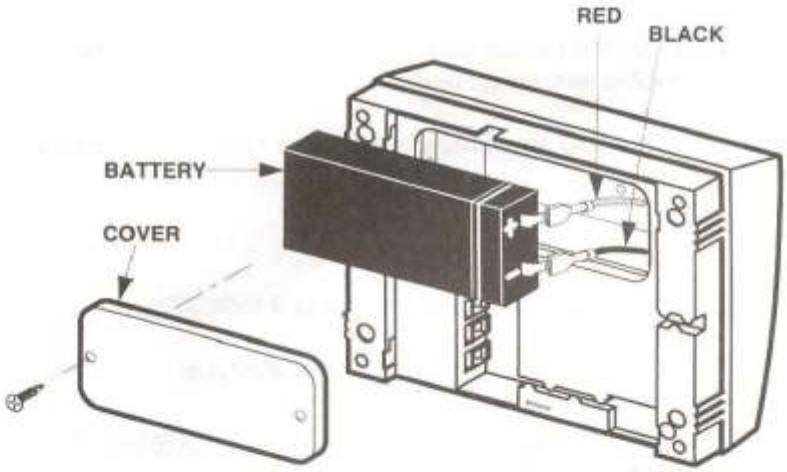
   CAUTION: Make sure to observe proper polarity.
3. Once the batteries are installed, twist the mounting bracket back onto the base of the detector.

Step 3: Powering Up the MCU

1. Plug the MCU into a 110-volt wall outlet not controlled by a switch.

2. Connect the battery in the back of the MCU.
   RED wire to + terminal
   BLACK wire to - terminal

   MCU announces: *MASTER PASSWORD IS NOT PROGRAMMED. ENTER NEW MASTER PASSWORD.*



NOTE: Make sure the + terminal is placed at the top of the MCU, as pictured above.

3. Enter a 4-digit password on the keypad. **HINT:** Have the customer choose numbers that are easy to remember but not easy to guess.

   MCU announces: *MASTER PASSWORD IS* (the 4-digit number). *PRESS RESET TO EXIT OR ENTER NEW MASTER PASSWORD.*

4. Press RESET.

   MCU announces: *RESET, THANK YOU. PLEASE ENTER TIME.*

5. Enter the current time as a 4-digit number. For example, 4:27 is entered as 0427.

   MCU announces: *PRESS 1 FOR a.m. PRESS 2 FOR p.m.*

6. Press 1 or 2. For example, press 2 for 4:27 p.m.

   MCU announces: *TIME IS 4:27 p.m.*

You are now ready to program the MCU with the location information for each component.

NOTE: To change the Master Password or system time, refer to the *Quick Guide* in the back of this manual.

Step 4: Programming the Components

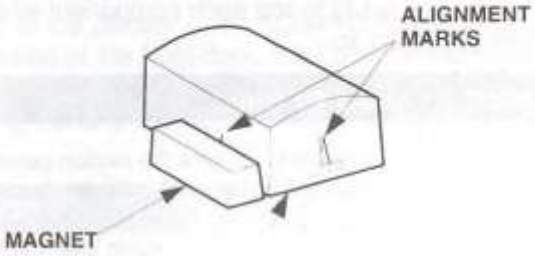
The MCU is now ready to learn the sensors and detectors into the system, including the remote control and panic button, if you have them. First, prepare the components, as described below.

PREPARING COMPONENTS

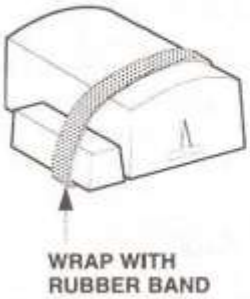
1. Place all the components - the sensors and detectors, including the remote control, near the MCU.

2. Place the motion detector FACE DOWN.

3. For each door/window sensor:
   a. Place a magnet next to each sensor, aligning it with the alignment mark on the long side of the sensor.



   b. Wrap a rubber band around each sensor and magnet group to hold them together. The rubber band is temporary.



PROGRAMMING THE MCU

With your help, the MCU will "learn" each sensor and detector in the system. It will prompt you through the same two steps for each component:

1. First, the MCU asks for the information on *Worksheet A: Sensor/Detector Chart.*

   Enter this information as the MCU asks for it, using the MCU keypad.

2. Next, the MCU will tell you to "trip" each of the components individually.

   Follow the chart below to trip each component.

TRIPPING COMPONENTS

You may want to review this information before you begin, so that you are ready to trip each component when the MCU prompts you to do so.

COMPONENT	HOW TO TRIP
Motion Detector	• After making sure the motion detector hasn't seen motion for at least 3 minutes, turn the motion detector face up. Wave your hand in front of it several times. Place it face down again after the MCU has learned it. **OR** • Put the motion detector into walk test mode and walk in front of the detector.
Door/Window Sensor	• Pull the small magnet away from the sensor, then rejoin them.
Remote Control	• Press the 0 on the remote control keypad. **NOTE:** The MCU calls the remote control a keypad sensor.
Panic Button	• Press and hold the button on the panic button for at least 1 second. **NOTE:** The MCU calls the panic button a police emergency sensor.
Smoke Detector	• Press and hold the test button until the piezo sounds. Hold it 10 - 15 more seconds.

EXAMPLE: LEARNING A SENSOR

Before you begin to program the components, follow along with this example as a door/window sensor is programmed from the information on *Worksheet A: Sensor/Detector Chart* shown below.

Worksheet A: Sensor/Detector Chart (Example)

1	2	3	4	5	6
Sensor Number	Sensor/ Detector Type	Location Description	Location Number	Arming Level HOME/ AWAY	Delay 1 or 2
1	D/W Sensor (1)	Front Door	15	HOME	1

Sensor #1 in this example is a door/window sensor - sensor code 1 (refer to the *Sensor Codes Chart* in Appendix B). The sensor is located at the front door, the Location Number is 15 (refer to the *Location Description and Number Chart* in Appendix B), the Arming Level is HOME, and the Delay Option is 1.

WHAT TO DO	WHAT THE MCU SAYS:
1. Press PROGRAM.	*PLEASE ENTER PASSWORD.*
2. Enter Master Password.	*TO CHANGE SYSTEM TIME OR DELAY TIME, PRESS 1.* *TO PROGRAM A SENSOR, LIGHT, OR OPTION,* PRESS 2. *TO CHANGE PASSWORD, PRESS 3.* *PRESS RESET TO EXIT.*
3. Press 2.	*TO PROGRAM SENSOR, PRESS 1.* *TO PROGRAM LIGHTS, OPTIONS, OR HOUSECODE, PRESS 2.* **Continued...**

Continued...

WHAT TO DO	WHAT THE MCU SAYS:
4. Press 1.	*TO LEARN NEW SENSOR, PRESS 1.* *TO DELETE SENSOR, PRESS 2.* *TO CHANGE SENSOR DESCRIPTION, PRESS 3.* *TO CHANGE SENSOR ARMED LEVEL, PRESS 4.* *TO CHANGE SENSOR DELAY STATUS, PRESS 5.* *FOR SENSOR STATUS, PRESS #.*
5. Press 1.	*TRIP SENSOR 1, OR PRESS RESET TO EXIT.*
6. Pull the small magnet away from the D/W sensor, then rejoin them.	*DOOR/WINDOW SENSOR 1, LEARNED OK, PLEASE ENTER SENSOR CODE.* *PRESS # FOR DESCRIPTION.*
7. Press 1.	*PLEASE ENTER DESCRIPTION NUMBER. PRESS # FOR DESCRIPTION NUMBER.*
8. Press 1, 5.	*ENTER SENSOR ARMED LEVEL.*
9. Press HOME.	*FOR SENSOR DELAY, PRESS 1. FOR SENSOR NOT DELAY, PRESS 2.*
10. Press 1.	*SENSOR 1 IS FRONT DOOR, DOOR/WINDOW SENSOR ARMED AT HOME, DELAY.* *TRIP SENSOR 2, OR PRESS RESET TO EXIT.*

Sensor 1 has now been learned by the MCU.

To review this information:

Press PROGRAM
Enter Master Password.
Press 2, 1, #.

The MCU will repeat the information that you gave it.

PROGRAMMING COMPONENTS

Now that you have read through the example, it's your turn to program components.

Since you will be using the information on *Worksheet A: Sensor/ Detector Chart*, be sure to have the worksheet in front of you when you begin. Refer to the **Learning a Sensor** example if you want to read through the steps as you program.

To begin, press PROGRAM. The MCU will then prompt you through programming, step by step.

NOTE: The system will be temporarily disabled during programming. If you do not press RESET to exit program mode manually, it will be cancelled automatically after 30 minutes. While in program mode, the MCU will continually announce test menu options, prompt for input, or flash its READY and STATUS lights. The MCU will only flash its READY and STATUS lights during downloading.

QUICK-KEY: TRIPPING A SENSOR

If you want to learn a sensor immediately, you don't need to wait for the MCU to announce each prompt. Simply press the keys shown below to jump quickly to **Tripping a Sensor**.

To QUICK-KEY directly to Tripping a Sensor:

Press PROGRAM.
Enter Master Password.
Press 2, 1, 1.
MCU announces: *TRIP SENSOR 1.*

TO COMPLETE PROGRAMMING

When you have tripped all the components and the MCU has learned each one, press RESET, OFF. You will hear the MCU announce, *OFF*.

Once you've finished programming the system, the components will be ready for positioning and pre-testing, as described in Section 5, *Positioning & Pre-Testing Components*.

The Basics: Positioning & Pre-Testing Components

Once the system is programmed, be sure to complete the steps in this section before moving on to Section 6, *Installation.* Follow the guidelines in this section to:

1. **POSITION** components.
2. **PRE-TEST** components.

What You Need:

- **All system components, labelled with their planned locations**
- **Pencil**
- **Post-it Notes for motion detector**
- **Completed *Installation Planning Worksheets* from Appendix B.**

Taking the time to position and pre-test the sensors and detectors BEFORE you install the components permanently will help to ensure that the system works correctly when the installation is complete.

HINTS

- **Do not mount components on metallic surfaces, like foil wallpaper, steel frames, or mirrored walls. Metallic surfaces may reduce or distort sensor transmission.**
- **Try to keep components within 50 feet of the MCU.**
- **Avoid areas where temperatures may exceed 100 degrees or drop below 40 degrees Fahrenheit.**
- **Test each component before permanently mounting it.**

Step 1: Positioning Components

Master Control Unit (MCU)

The MCU can be mounted on a wall or placed on a desk, tabletop, or anywhere that is convenient to use.

Make sure to connect the MCU to an unswitched outlet. Secure the cord retainer to the outlet plate.

DO NOT UNPLUG OR RELOCATE THE MCU

You should place the MCU in its permanent location before testing the components. If you move the MCU after testing the components, it could affect the performance of the system; you will have to retest all of the sensors.

If, for any reason, you do unplug the MCU to move it, be sure that the battery is connected, so that it does not lose the information programmed into it. Once you unplug it, the STATUS light and POWER light begin to flash. To stop the lights from flashing, plug the MCU into an unswitched outlet, secure the cord retainer to the outlet plate, and press RESET.

Interior Siren

The interior siren can be plugged into any standard 110-volt wall outlet that is not controlled by a switch. The interior siren can be secured to the outlet cover.

Remote Control

If you plan to mount the remote control, position it at eye level, in a location where it is easily accessible. However, a remote control can also be carried or left in a car.

NOTE: The remote control is subject to range limits.

Lamp and Appliance Modules

The Lamp and Appliance Modules may be plugged into any standard 110-volt wall outlet that is not controlled by a switch.

Motion Detector

- Mount the motion detector on a outside wall facing in.
- Position it so that it faces a solid reference point, like a wall.
- Do not aim the motion detector at windows, fireplaces, air conditioners, or forced air heating vents, because sudden changes in temperature, such as those caused by heating vents, may trigger a false alarm. The motion detector will not be tripped by gradual changes in temperature.

TEMPERATURE RANGE

The motion detector will operate in temperatures ranging between 10 and 120 degrees Fahrenheit.

DETECTOR BEAMS

The motion detector emits a fan-like pattern of beams that "watch" a room. For it to work most effectively, it should be positioned at a location where an intruder would be most likely to walk across.

COVERAGE

The motion detector has a range of approximately 30 feet. For best coverage, place it 5 to 8 feet high. While greater height increases the detector's range, it also creates a larger "dead" area directly beneath it. For this reason, we recommend mounting it in a corner, which will increase coverage and leave a smaller dead area.

MOUNT IT PERMANENTLY
The motion detector can be mounted on a flat surface or in a corner. It MUST be mounted permanently. DO NOT set it on a shelf, for example.

PETS
The motion detector has no way of distinguishing between an intruder and the family pet. A pet can trip an alarm as easily as a burglar can. If you have a pet, either plan to confine it whenever the motion detector is armed, choose to locate the detector in an area the pet is unable to enter, or use a pet lens.

Smoke Detector

For smoke detector mounting location, refer to the instructions packaged with the detector.

Door/Window Sensors

GUIDELINES
- Install door/window sensors as high up as possible to prevent them from being knocked off during normal operation.
- Make sure the magnet and sensor do not interfere with the operation of the door or window.

Step 2: Pre-Testing Sensor and Detector Sites

Once you have determined the exact position of all sensors and detectors in the system and have marked their permanent location with a pencil, you are ready to pre-test the location and position of the sensors and detectors.

CAUTION: It is very important to pre-test sensor and detector locations and positions before they are permanently mounted. DO NOT proceed to installation until you have performed the System Sensor Chime Test.

PERFORMING THE SYSTEM SENSOR CHIME TEST

The purpose of this pre-test is to ensure, prior to installation, that sensors and detectors can successfully signal the MCU from the location and position chosen for them.

To perform the System Sensor Chime Test:

1. Learn one sensor (for example, a door/window sensor), then:

WHEN TO USE	WHAT TO DO	WHAT HAPPENS
• To test the location and position of all sensors and detectors to make sure they can successfully signal to the MCU.	• Press TEST.	• MCU announces: *PLEASE ENTER PASSWORD.*
	• Enter Master Password.	• MCU announces test menu options.
	• Press 0.	• MCU announces: *SYSTEM SENSOR CHIME TEST IN ON.*
Trip the sensor at each proposed sensor and detector site and listen for the number of beeps from the MCU.		• If MCU beeps 6 to 8 times, the site is fine. If the MCU beeps less than 6 times, you may need to reposition or relocate the sensor or detector.
After all sensor and detector sites have been tested, press RESET to exit.		• MCU announces: *RESET, EXIT SYSTEM CHIME TEST.*

COMPLETING THE SYSTEM SENSOR CHIME TEST

Once you successfully complete the *System Sensor Chime Test*, (all sensor and detector sites are okay), you are ready to complete the system installation. Turn to Section 6.

IF YOU CANNOT TRIP A COMPONENT

If you cannot trip a component (the MCU continues to repeat a Sensor Number with its Location Number), try the following:

- Tripping the sensor again.
- Moving the sensor slightly (left or right, up or down). A small adjustment may allow the sensor to successfully send its signal to the MCU.
- Repositioning the sensor in a new location.

If you continue to receive the same message, press RESET to exit test mode, and call the Sprint Support Line: 1-800-854-5666.

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The Basics: Installing the System

In order to get the system up and running quickly, complete these final four installation steps below, in the order given:

1. **INSTALL and CONNECT** the MCU.
2. **MOUNT** the smoke detector and motion detector.
3. **MOUNT** the door/window sensors, panic button, and remote control.
4. **PLUG IN** Lamp and Appliance Modules.
5. **TEST** the system.

What You Need:

- **All system components, labelled with their planned locations**
- **Completed *Installation Planning Worksheets* from Appendix B**
- **Screwdriver**
- **Pencil**
- **Hammer**
- **Nail or awl**

From plastic parts bag:

- **4 rubber pads**
- **telephone cord**
- **screws**
- **anchors**

Step 1: Installing and Connecting the MCU

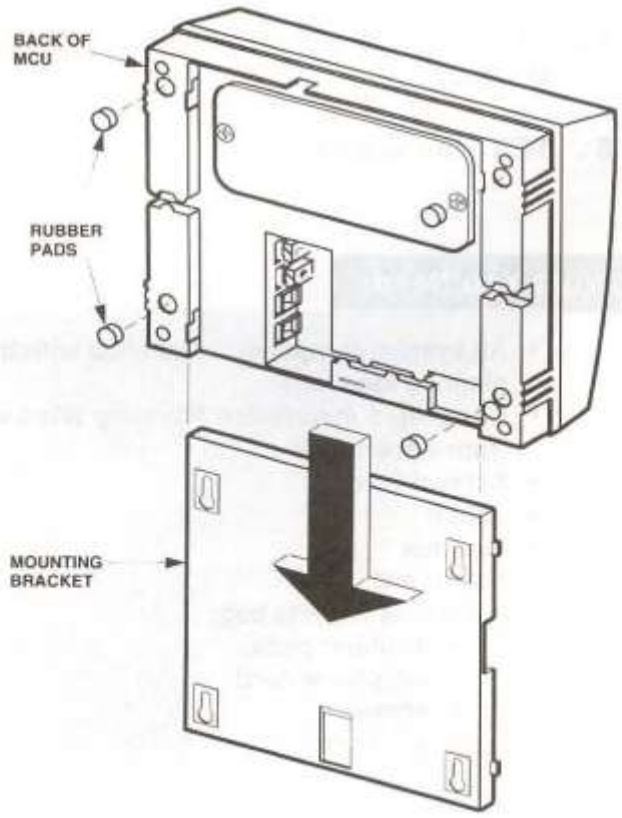
The MCU is designed to be used on a desk top or mounted on a wall. If you choose to mount the MCU on the wall, it must be installed using screws only.

DESKTOP INSTALLATION

1. Slide the bracket off the back of the MCU.

2. Peel the four rubber pads off the paper included in the system package.

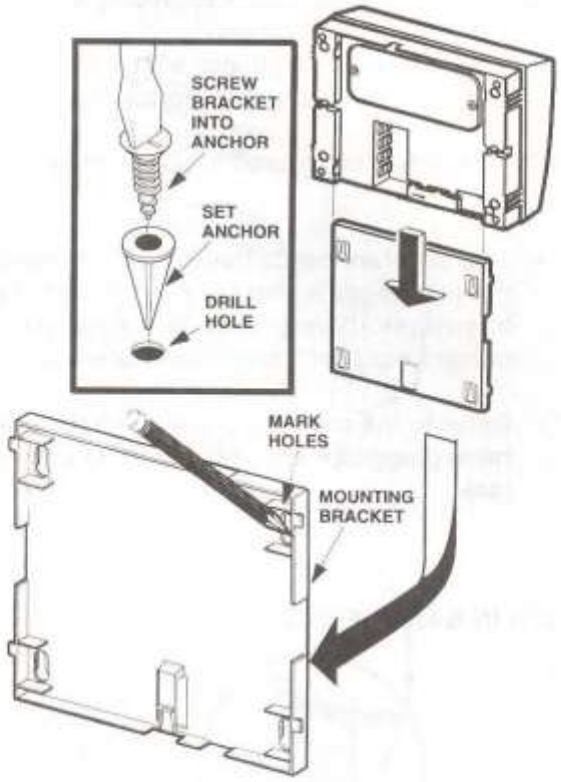
   Press them into place, locating one on each corner of the MCU base.



WALL MOUNTING

1. Slide the bracket off the back of the MCU.

2. Use the bracket as a template, to mark four holes. Make sure to level the mounting bracket.



3. Punch anchor holes, using a nail or awl with a smaller diameter than the anchors, or drill four 3/16" holes.

4. Tap the anchors into the holes, and mount the bracket using the screws provided.

5. Slide the MCU onto the bracket.

Connecting the MCU

To connect the MCU with the local phone system, follow the instructions in this section for the type of phone jack (RJ31X or RJ11) the system will be connected to.

The RJ31X jack required if:

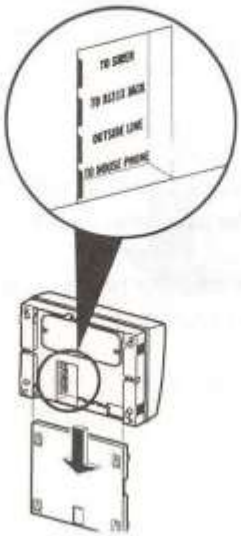
- The system is monitored by a monitoring bureau.
- TouchTone phones will be used to control the system from inside the home.

NOTE: The RJ31X jack shall be used in UL Listed systems.

HINTS:

- **Two different cords have been included in the plastic parts bag (an RJ31X cord and an Interrogator/Siren cord). Be sure to use the correct cord for the phone jack used.**
- **Refer to the drawing below to check that you have plugged each phone into its correct jack.**

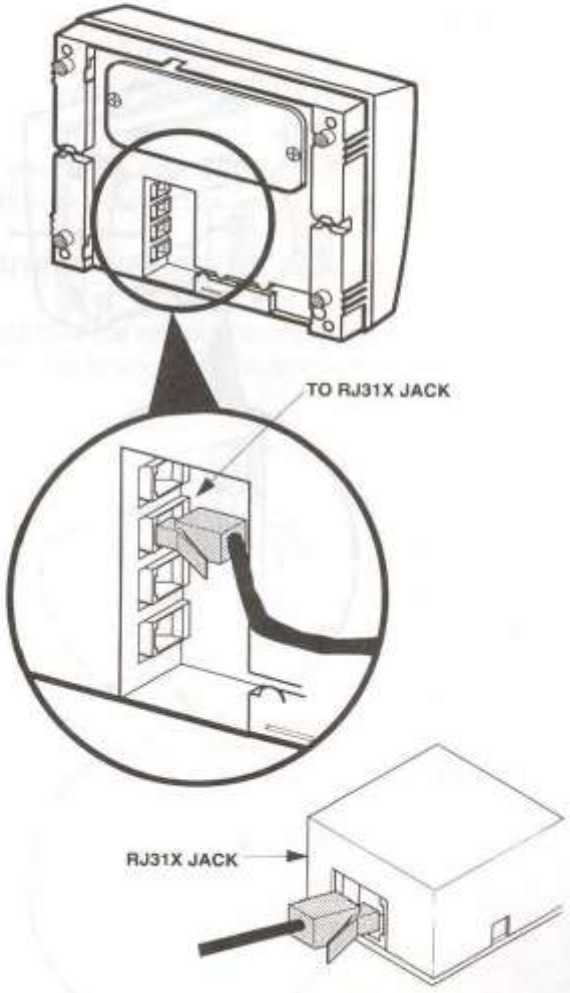
DETAIL:
JACK INPUTS IN BASE OF MCU



IF YOU HAVE AN RJ31X JACK:

USE THE SPECIAL DB-8 CORD PROVIDED.

1. Plug one end of the DB-8 cord into the RJ31X jack.
2. Plug the other end of the DB-8 cord into the jack input labelled "TO RJ31X JACK" in the base of the MCU.



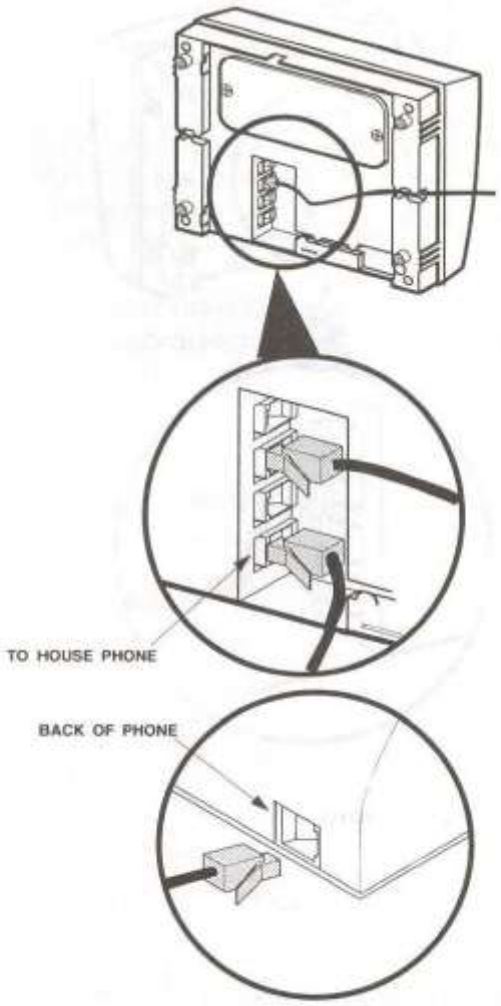
NOTE: The RJ31X jack should be installed a maximum of 8 to 10 feet from the MCU.

CONNECTING A TOUCHTONE PHONE TO THE MCU

If you want to use a TouchTone phone at the same location as the MCU:

- Plug the cord from the phone into the jack labelled "TO HOUSE PHONE" in the base of the MCU.

  You can then use the phone as before to make and receive calls.



Step 2: Mounting the Smoke Detector and Motion Detector

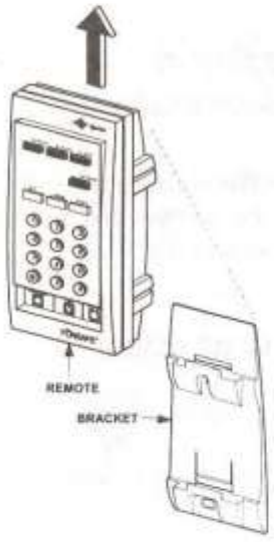
Refer to the *Installation Instructions* packaged with the smoke detector and motion detector for installation procedures.

Step 3: Mounting the Door/Window Sensors and Remote Control

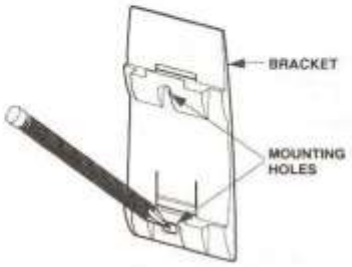
Refer to the *Installation Instructions* packaged with the door/window sensor for installation procedures.

MOUNTING THE REMOTE CONTROL

1. Remove the remote control from its mounting bracket; hold the bracket and slide the remote control upwards.



2. Mark the screw holes, using the bracket as a template.



3. Punch anchor holes using a nail or awl with a smaller diameter than the anchors, or drill two 3/16" holes.

4. Tap the anchors into the holes and mount the case, using the screws provided.

5. Slide the remote control back into its bracket.

Step 4: Plugging In Lamp and Appliance Modules

Before you begin, make sure the letter dial is set to the appropriate housecode and the number dial is set to the Lamp or Option number chosen in Section 3 or 7.

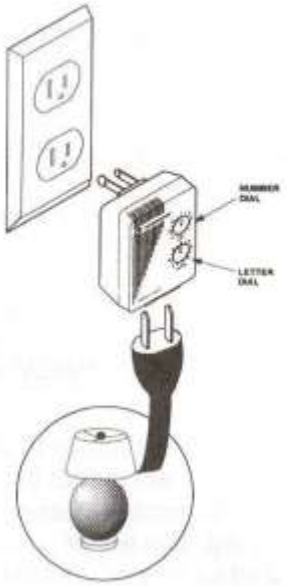
PLUGGING IN LAMP MODULES

1. Turn on the lamp to control.

2. Unplug the lamp from its wall outlet.

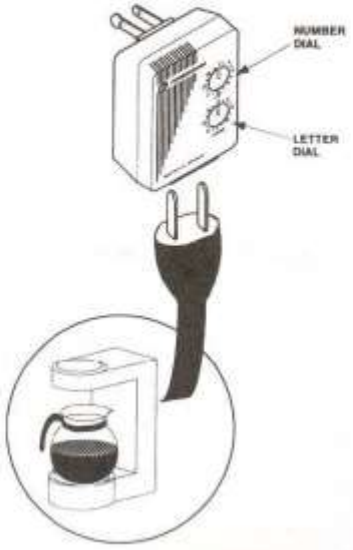
3. Plug the lamp into the Lamp Module.

4. Plug the Lamp Module into the wall outlet.



PLUGGING IN APPLIANCE MODULES

1. Turn on appliance to level it will be operated at.
2. Plug the appliance into the Appliance Module.
3. Plug the Appliance Module into the wall outlet.



Step 5: Performing the Final System Test

You're almost done! Once you mount the components, you should conduct one additional test of the system to ensure that all its components are functioning correctly. Perform the complete *Home Sensor Test* on the next page - and the system is ready to go!

Performing the Home Sensor Test

The MCU will tell you the total number of sensors in the system, and then name each one. It will repeat this list continuously during the test. As you trip each sensor and it tests OK, the MCU will remove it from the list. The test is complete when all sensors have been tripped, and each one has tested OK.

NOTE: All test procedures must be performed while the system arming level is OFF.

WHEN TO USE	WHAT TO DO	WHAT HAPPENS
• To test all sensors, detectors, panic button, and remote control	• Press TEST.	• MCU announces: *PLEASE ENTER PASSWORD.*
	• Enter Master Password.	• MCU announces test menu options.
	• Press 2.	• MCU announces the total number of sensors, then names each one.
TRIP EACH SENSOR • Trip D/W Sensors: Open protected doors and windows. • Trip Smoke Detector: Press TEST button until detector starts to beep. Hold button 10 seconds more. • Trip Motion Detector: Leave area for 3 minutes, then walk in front of detector. **OR** Enable walk test mode, then walk in front of detector. • Trip Panic Button: Press the button for 4 seconds. • Trip Remote Control: Press any key.		Interior siren beeps as each sensor is tripped. MCU removes each sensor name from the list only after it tests OK.
If Sensor Test is OK, press RESET to exit.		MCU announces: *SENSOR TEST OK.*

NOTE: The system is temporarily disabled during testing. If you do not press RESET to exit test mode manually, test mode will be cancelled automatically after 30 minutes. While in test mode, the MCU will continually announce test menu options or prompt for input.

IF THE MCU CONTINUES TO REPEAT A SENSOR

If the MCU repeats a Sensor Number, try the following:

- Trip the sensor again.
- Move the sensor slightly (left or right, up or down).
- Reposition the sensor in a new location.

If you continue to receive the same message, press RESET to exit Test mode, and call the Sprint Support Line: 1-800-854-5666.

Testing Lamps and Appliances

If you want to test whether the lamp and appliances connected to the system are working correctly, press LIGHTS and the Light Number of the lamp you want to test. To test the appliances, press OPTION and the Option Number of the appliance you want to test. The lamp or appliance should turn on if originally off or turn off if originally on.

The Basics: Customizing the System

Once you've programmed the system to monitor the home, you may want to add some of the home management features described in this section. When programmed for the owner's convenience, the system can turn on lights, a coffee pot, an air conditioner, etc.

In this section you'll also learn about dismantling and reinstalling the system.

What You Need:

- **Worksheets B and C from Appendix B**

If setting Modules:
- **Lamp and/or Appliance Modules**
- **Screwdriver**

NOTE: If you've just turned to this section from Section 3 *Planning*, continue filling out the worksheets by following the instructions for *Setting Lamp Modules* in this section.

In this section, you will find information for customizing:

LAMP MODULES	• Presetting ON/OFF Times • Checking Lamp Status • Disarming Timed Lamp Modules • Setting Motion Detector to turn Lamps ON
APPLIANCE MODULES	• Presetting ON/OFF Times
MCU	**Customized Programming:** • Time Features • Housecodes • Sensor/Detectors • Passwords

Setting Lamp Modules

You can set the Lamp Modules to customized settings, enabling the owner to do the following:

1. Select specific times (other than the preset times) for lamps to turn ON and OFF.
2. Check lamp status (that is, if they are ON/OFF) in a particular location.
3. Set lamps to turn ON whenever someone walks past the motion detector.

To take advantage of any of these features, complete the steps below:

First, Fill Out the Lamp Module Chart

You will need to fill out *Worksheet B: Lamp Module Chart*.

Worksheet B: Lamp Module Chart (Sample)

1	2	3	4	5		6	7
Type of Light	Light Number	Location Description	Location Number	Owner-Set		Delay 1 or 2	Mot Det Sensor Number
				On-Tm	Off-Tm		
Untimed	1						
Untimed	2						
Motion	3						
Motion	4						
Timed	5						
Timed	6						

1. Select Lamp Module Modes

Select a Lamp Mode from the Lamp Module Modes chart below.

LAMP MODULE MODE	IF YOU WANT TO TURN LAMP(S) ON AND OFF	LIGHT NUMBER
Untimed Light	Manually using the MCU, remote control, or TouchTone phone.	1 or 2
Motion Detector Light	Automatically when someone enters the room between 6 p.m. and 7 a.m. and passes by the motion detector.	3 or 4
Timed Light	At preset times: ON at 5 p.m., OFF at 10 p.m. ON at 6 p.m., OFF at 11 p.m. ON at 7 p.m., OFF at 12 Mid.	 5 6 7
Entry/ Exit Light	Automatically when the system is armed or disarmed.	8
Alarm Memory Light	As a warning that an alarm was tripped (lamp will remain ON after siren shuts off).	9

2. List the Location Description & Number

Write the Location Description in column 3 and its Location Number in column 4, using the *Location Description and Number Chart* in Appendix B.

3. Indicate Owner-Set Time

If you selected Light Mode 5, 6, or 7 (Timed Lights), you can either set ON and OFF times, or use the preset ones. (Pressing RESET when prompted for ON and OFF times will select the preset ON and OFF times.)

Write the ON and OFF times for the lamp in column 5.

4. Select Delay Time

If Light Mode 5, 6, or 7 is selected, you need to decide whether to activate the *Delay Time* feature, which turns lamps ON or OFF within 30 minutes of the desired time. The lights in the home will then turn on and off in a more natural way, giving the home a "lived-in" look.

For example:

- If you set a lamp to turn on at 5 p.m., it will turn on sometime between 5 p.m. and 5:30 p.m.
- If you choose *No Delay Time*, the lamp will turn on every day at exactly its preset time.

Write 1 for Delay Time or 2 for No Delay Time in column 6.

Next, Set the Lamp Module

Set the front dial on the Lamp Module to a Light Number from 1 to 9. The correct Light Number for each Module will be found in Column 2 of *Worksheet B: Lamp Module Chart*.

NOTE: Make sure the Letter Dial is set to the Lights Housecode (default is A).

Now, Program the MCU

Once you've set the Lamp Modules, you will need to give the information on the completed *Worksheet B: Lamp Module Chart* to the MCU.

1. Press PROGRAM.
   MCU announces: *PLEASE ENTER PASSWORD.*

2. Enter your Master Password.
   MCU announces: *TO CHANGE...*

3. Press 2, 2, 1.
   MCU announces: *LIGHTS HOUSECODE IS **A**. PLEASE ENTER LIGHT NUMBER.*

4. Enter the Light Number selected from column 2 of *Worksheet B.*

5. Enter the Location Number from column 4 of *Worksheet B.*

6. For Light Numbers 3 and 4, you will need to enter the motion sensor number.

7. For Light Numbers 5, 6, and 7 only:

   To use preset ON/OFF times, press RESET when asked to input ON or OFF times.

   To set ON/OFF times, enter the 4-digit ON time and OFF time followed by 1 for a.m. or 2 for p.m.

8. MCU announces: *FOR LIGHTS DELAY, PRESS 1 FOR LIGHTS NOT DELAY, PRESS 2.*

   Press 1 to activate Delay or press 2 to keep lights at exactly their preset ON/OFF times.

9. Press RESET, OFF to exit.

Checking Lamp Status

The status of lamps can be checked at any time, by pressing LIGHTS, # on the MCU or *, 5, # on the home phone during local phone access.

Disarming Lamp Modules

If a Lamp Module is set as a Timed Light (Light Numbers 5, 6, and 7), it will function as soon as it is plugged in - it is already armed and active.

A user may want to disarm a Timed Lamp Module at certain times. For example, a user may want a lamp to turn on at a preset time during the week but not on weekends.

Disarming the Lamp Module will:
- Deactivate the Module as a Timed Light.
- Retain current ON/OFF preset times.

To Disarm a Timed Lamp Module:

1. Press PROGRAM.
   MCU announces: *PLEASE ENTER PASSWORD.*
2. Enter your Master Password.
3. Press 1, 2.
4. Enter Light Number of Timed Light (5, 6, or 7).
5. Press RESET, OFF to exit.

Each time you follow these steps, the lamp will Arm if currently Disarmed or Disarm if currently Armed.

NOTE: During an Alarm, lamps connected to Timed Lamp Modules flash.

Setting the Motion Detector

You can set the system to turn a lamp on whenever someone walks past the motion detector (only between the hours of 6 p.m. and 7 a.m., when the motion detector is not armed). The lamp will turn off after 5 minutes of inactivity.

This feature can be used to turn on a hall light automatically when the owner comes home late at night or if the owner leaves early in the morning.

Another suggestion: If there are elderly people or children in the home, place the motion detector and lamp in places where the owner can be alerted to the movements of the family during the night.

Before you start, check that the MCU has learned the motion detector, as described in Section 4. Then you will need to give the information on the completed *Worksheet B: Lamp Module Chart* to the MCU

1. Press PROGRAM.
   MCU announces: *PLEASE ENTER PASSWORD.*
2. Enter Master Password.
   MCU announces: *TO CHANGE...*
3. Press 2, 2, 1.
   MCU announces: *LIGHTS HOUSECODE IS A. PLEASE ENTER LIGHT NUMBER.*
4. Enter Light Number you selected from column 2 of *Worksheet B.*
5. Enter the Location Number from column 4 of *Worksheet B.*
6. Enter the Motion Detector Sensor Number from column 7 of *Worksheet B.*
7. Press RESET, OFF to exit.

Setting Appliance Modules

Using Option/Appliance Modules, you can customize the system in the following ways:

1. Select specific times for appliances to turn ON and OFF.
2. Check appliance status (that is, if they are ON/OFF) in a particular location.

To take advantage of any of these features, complete the following steps:

First, Fill Out the Option/Appliance Module Chart

Begin by filling out *Worksheet C: Option/Appliance Module Chart*. A sample chart is shown on the next page.

1. Select Option/Appliance Module Modes

Select an Option/Appliance Mode (Timed or Untimed).

2. List the Location Description & Number

Write the Location Description in column 3 and its Location Number in column 4, using the *Location Description and Number Chart* in Appendix B.

3. Indicate Owner-Set Time

If you selected Option/Appliance Mode 4, 5, 6, 7, 8, or 9 (Timed Appliances), you must select ON and OFF times.

Write the ON and OFF times for the Appliance Module in column 5.

Worksheet C: Option/Appliance Module Chart (Sample)

1	2	3	4	5	
Type of Appliance	Option Number	Location Description	Location Number	Owner-Set	
				On-Tm	Off-Tm
Untimed	1				
Untimed	2				
Untimed	3				
Timed	4				
Timed	5				
Timed	6				
Timed	7				
Timed	8				
Timed	9				

Next, Set the Option/Appliance Module

Set the front dial on the Appliance Module to an Option Number from column 2 of *Worksheet C: Option/Appliance Module Chart.*

To use an Appliance Module as an Untimed Module, set the front dial on the Module to a number from 1 to 3. For a Timed Module, set the dial to a number from 4 to 9.

NOTE: Make sure the Letter Dial is set to the Options Housecode (default is B).

Now, Program the MCU

Once you've set the Appliance Modules, you will need to give the information on the completed *Worksheet C: Option/ Appliance Module Chart* to the MCU.

1. Press PROGRAM.
   MCU announces: *PLEASE ENTER PASSWORD.*

2. Enter Master Password.
   MCU announces: *TO CHANGE...*

3. Press 2, 2, 2.
   MCU announces: *OPTION HOUSECODE IS **B**. PLEASE ENTER OPTION NUMBER.*

4. Enter the Option Number selected from column 2 of *Worksheet C.*

5. Enter the Location Number from column 4 of *Worksheet C.*

6. Enter the 4-digit ON Time. For example, 4:27 is entered as 0427.

   Press 1 for a.m. or 2 for p.m.

7. Enter the 4-digit OFF Time. For example, 11:27 is entered as 1127.

   Press 1 for a.m. or 2 for p.m.

8. Press RESET, OFF to exit.

NOTE: Like the Timed Light Module, you can disarm a Timed Appliance Module if you do not want the appliance to go on as programmed.

The MCU: Customized Programming

Time Features

Use TIME FEATURES to activate or change timed components.

To enter program mode:

1. Press PROGRAM
2. Enter Master Password, then:

FEATURE	WHEN TO USE	WHAT TO DO
System Time	To change the time on the MCU.	Press 1, 1. Enter time as a 4-digit number e.g., 0900=9 o'clock. Enter 1 for a.m. or 2 for p.m.
Timed Light	To activate (arm) or disarm Timed Lights set to 5, 6, or 7.	Press 1, 2. Enter Light Number 5, 6, or 7. Each time you do this, the light will arm if currently disarmed and disarm if armed.
Timed Option (Appliance)	To activate (arm) or disarm Timed Options set to 4 - 9.	Press 1, 3. Enter Option Number 4 - 9. Each time you do this, the Option will arm or disarm.
Entry/Exit Delay Time	To change Entry/Exit Delay Time.	Press 1, 4. • The preset time for Entry Delay is 30 seconds (the range is 30 to 45 seconds). • The preset Exit Time is 45 seconds (the range is 30 to 60 seconds). Enter 2-digit time, e.g., 30=30 seconds. Press RESET to keep preset time.
Siren Time	To change length of interior siren sound.	Press 1, 5. The preset time is 15 minutes (the range is 10-20 minutes). Enter 2-digit time, e.g., 10 = 10 minutes. (Shall be at least 4 minutes in UL Listed systems.) Press RESET to keep preset time.

Programming Sensors/Detectors

The features listed below all pertain to sensors/detectors.

To enter program mode:
1. Press PROGRAM.
2. Enter Master Password, then:

FEATURE	WHEN TO USE	WHAT TO DO
Learn Sensor/ Detector	To learn a sensor/detector.	Press 2, 1, 1. Refer to *Step 4: Programming the Components* in Section 4 for more information.
Delete Sensor/ Detector	To delete a sensor/detector from the MCU.	Press 2, 1, 2. Enter Sensor Number to delete. Press 1 to delete.
Change Sensor/ Detector Description	To change the Location Description of a programmed sensor/detector.	Press 2, 1, 3. Enter Sensor Number and the new Location Number.
Change Sensor/ Detector Arming	To change the arming level of a programmed sensor/detector.	Press 2, 1, 4. Enter the number of the sensor/detector you wish to change. Enter the new arming level.
Change D/W Sensor Delay Status	To change the delay status of a door/window sensor.	Press 2, 1, 5. Enter the number of the sensor you wish to change. Enter the new delay status.
Sensor/ Detector Status	To review the list of all components in the system.	Press 2, 1, #.

Programming Lamp & Appliance Modules

1. Press PROGRAM.
2. Enter Master Password, then:

FEATURE	WHEN TO USE	WHAT TO DO
Program or Change Lamp	To enter or change Location Description.	Press 2, 2, 1. Enter Light Number from *Worksheet B.* Enter Location Number.
Delete Lamp	To delete Lamp Module.	Press 2, 2, 3. Enter Light Number to remove. Press 1 to delete.
Time Lights (Only lamps set at 5, 6, or 7 may be timed)	To set ON/OFF Times instead of using preset times.	Press 2, 2, 1. Enter Light Number. Enter Location Number. Enter 4-digit ON time/OFF time. Press 1 for Delay.
Program or Change Appliance	To enter or change Location Description.	Press 2, 2, 2. Enter Option Number from *Worksheet C.* Enter Location Number (more than one appliance may be set to the same Location Number).
Delete Appliance	To delete Appliance Module.	Press 2, 2, 4. Enter Option Number of appliance to remove. Press 1 to delete.
Timed Appliance (only appliances set at 4 - 9, may be timed)	To set appliance ON/OFF times.	Press 2, 2, 2. Enter Option Number. Enter Location Number. Enter 4-digit ON time/ OFF time.

Housecodes

The features listed below all pertain to housecodes. Housecodes are used by the system to recognize the Lamp and Appliance Modules and to ignore modules that are part of another system - a neighbor's for example.

To enter program mode:

1. Press PROGRAM.
2. Enter Master Password, then:

FEATURE	WHEN TO USE	WHAT TO DO
Change Lights Housecode	To change housecode from the preset "A" to any letter from "A" to "P."	Set dial on Module to desired letter. Press 2, 2, 5, 1. Enter the 2-digit number for the letter you selected from the Housecodes list below.
Change Options Housecode	To change Housecode from the preset "B" to any letter from "A" to "P."	Set dial on Module to desired letter. Press 2, 2, 5, 2. Enter a 2-digit number that corresponds to the letter on the list below.
Housecode Status	To obtain a list of Housecode settings.	Press 2, 2, 5, #.

Housecodes	A = 01	E = 05	I = 09	M = 13
	B = 02	F = 06	J = 10	N = 14
	C = 03	G = 07	K = 11	O = 15
	D = 04	H = 08	L = 12	P = 16

NOTE: Your Lamp and Appliance Module housecodes must be set to different letters. However, if you use an Appliance Module to control a lamp, you could set that Module to the same housecode used for Lamp Modules.

Passwords

You can change the Master Password or create a separate Visitor Password, by following the steps below.

To enter program mode:

1. Press PROGRAM.
2. Enter Master Password, then:

FEATURE	WHEN TO USE	WHAT TO DO
Master Password	To change the Master Password.	Press 3, 1. Enter new Password.
Visitor Password	To program a separate password for visitors e.g., baby sitter, repair people, or guests.	Press 3, 2. Enter a 4-digit number for the Visitor Password.

NOTE: The Visitor Password should be a different 4-digit number than the Master Password. The Visitor Password can do everything the Master Password can do, except program and test. For security, set the Visitor Password back to the Master Password after use.

A summary of these features can be found in the *Quick Guide* located in the back of this manual.

Moving to a New Residence

To move the system to a new residence:

1. Unplug the MCU battery.
2. Unplug the MCU from the wall outlet.
3. Unplug the interior siren and disconnect the battery.
4. Remove all the system components. Don't forget the remote control and panic button.
5. Re-install the system at the new residence. Follow the same procedures as when the system was initially installed.
6. Notify monitoring bureau of move to new residence.

Appendix A: Troubleshooting

MCU STATUS Light

If the STATUS light is flashing, press STATUS to determine the problem. All system troubles will be announced.

READY Light

If the READY light is OFF, press STATUS. The MCU will tell you which door or window is open.

Motion Detector

If the Motion Detector is causing false alarms:

- Make sure it is not pointing toward a forced air heating/ cooling system or vent. Also, make sure that the detector is not pointing at something that can be moved by forced air, for example, draperies.
- Make sure it is not pointing at windows with heavy sun exposure -- heat may set it off.
- Check the detector's positioning. Make sure it is at the recommended height (6' 8").
- Check that pets are kept out of the area protected by the detector.

Interior Siren

If the interior siren doesn't work properly:

- Make sure the siren is correctly plugged into an electrical outlet not controlled by a switch.
- Press RESET.
- Check status. The siren should sound either 1, 2, or 3 beeps for the current arming level.
- Press STATUS on the remote control to check if the siren's LED flashes. The siren's LED flashes whenever a valid message is received.

  If the LED doesn't flash, no message was received. If the LED flashes but there are no beeps indicating the current arming level, the interior siren may have learned the wrong housecode. And if this is the case, perform the following steps.

If the interior siren *still* doesn't work properly:

- Unplug the siren.
- Remove the battery and wait 1 minute.
- Re-install the same battery.
- Plug the siren back into the outlet.
- Press RESET.
- Press STATUS.
- The siren should now work properly.

Lamp and Appliance Modules

A. If the Lamp and Appliance Modules are not working properly:

- First check the housecode of the modules. The Lamp and Appliance Module housecodes should be set to different letters.
- If the module is plugged into an outlet controlled by a switch, check that the switch is turned on.
- Check that the lamp switch on the lamp is in the ON position.

NOTE: The MCU will not allow the same housecode for lamps and appliances. If you set the appliance module to the light's housecode, the LIGHTS button will control them.

B. If the Lamp Modules still do not function properly:

- Set the housecode on all Lamp Modules to a setting other than "A" or "B."
- Program the new housecode into the MCU. See the *Additional Features* section in this manual for instructions.

C. If the Appliance Modules still do not function properly:

- Set the housecode on all Appliance Modules to a setting other than "A," "B," or the current housecode of the Lamp Modules.
- Program the new housecode into the MCU. See the *Additional Features* section in this manual for instructions.

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Appendix B: Installation Planning Worksheets

Fill out the following worksheets to install the system.

When filling out the worksheets:

1. If you are installing a door/window sensor, list the sensor code after you list the sensor/detector type in column 2. Refer to C-5 for a list of sensor codes.
2. Refer to C-5 for a list of location descriptions and numbers.

Worksheet A: Sensor/Detector Chart

1	2	3	4	5	6
Sensor Number	Sensor/ Detector Type	Location Description	Location Number	Arming Level HOME/ AWAY	Delay 1 or 2
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

Worksheet A: Sensor/Detector Chart (cont.)

1	2	3	4	5	6
Sensor Number	Sensor/ Detector Type	Location Description	Location Number	Arming Level HOME/ AWAY	Delay 1 or 2
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

Worksheet B: Lamp Module Chart

1	2	3	4	5		6	7
Type of Light	Light Number	Location Description	Location Number	Owner-Set		Delay 1 or 2	Mot Det Sensor Number
				On-Tm	Off-Tm		
Untimed	1						
Untimed	2						
Motion	3						
Motion	4						
Timed	5						
Timed	6						
Timed	7						
Entry/Exit	8						
Alarm Memory	9						

Worksheet C: Option/Appliance Module Chart

1	2	3	4	5	
Type of Appliance	Option Number	Location Description	Location Number	Owner-Set	
				On-Tm	Off-Tm
Untimed	1				
Untimed	2				
Untimed	3				
Timed	4				
Timed	5				
Timed	6				
Timed	7				
Timed	8				
TImed	9				

Sensor Codes Chart

Sensor	Sensor Code
Door	1
Window	2
Motion	3
Heat	4
Freeze	5
Flood	6
Glass Break	7
Utility	8

Location Description and Number Chart

Location Description	Number	Location Description	Number	Location Description	Number
No description	0	Living Room	10	Downstairs	20
Bedroom 1	1	Dining Room	11	Hall	21
Bedroom 2	2	Guest Room	12	Front Hall	22
Bedroom 3	3	Laundry Room	13	Kitchen	23
Bedroom 4	4	Utility Room	14	Office	24
Master Bedroom	5	Front Door	15	Basement	25
Child's Bedroom	6	Back Door	16	Garage	26
Guest Bedroom	7	Garage Door	17	Attic	27
Bathroom	8	Basement Door	18	Closet	28
Master Bathroom	9	Upstairs	19	Den	29

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QUICK GUIDE

Programming the FŌNSAFE System

Press **PROGRAM**.
Enter **Master Password**, then:

FOR	TO	PRESS
TIME	Change System Time	1, 1
	Arm Timed Lights	1, 2
	Arm Timed Options	1, 3
	Change Entry/Exit Delay Time	1, 4
	Change Siren Time	1, 5
SENSORS/ DETECTORS	Learn New Sensor/Detector	2, 1, 1
	Delete Sensor/Detector	2, 1, 2
	Change Description	2, 1, 3
	Change Arming Level	2, 1, 4
	Change Delay Status	2, 1, 5
	Listen to Status	2, 1, #
MODULES	Program or Change Lights	2, 2, 1
	Program or Change Options	2, 2, 2
	Delete Lights	2, 2, 3
	Delete Options	2, 2, 4
HOUSECODES	Change Lights Housecode	2, 2, 5, 1
	Change Options Housecode	2, 2, 5, 2
	Listen to Housecode Description	2, 2, 5, #
PASSWORDS	Change Master Password	3, 1
	Change Visitor Password	3, 2

To exit from Program Mode at any time:
Press RESET, OFF.

Sprint/North Supply
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Part #46-926