Simplicity™

(Installation Manual)

1934 Lakeview Avenue, Dracut, MA 01826, USA
Phone (978) 957-4ECU Fax (978) 957-8366

http://www.qtiusa.com

Trademarks, Version, Printing, and Copyright

Trademarks

Simplicity™ All-In-One™, Simplicity™ Voice, Simplicity™ Switch, Smart Switch™, QVR™ and VMK™ are registered trademarks of Quartet Technology, Inc.

X-10™ is a registered trademark of X-10 (USA), Inc.

Version

March, 2011
Version 9.3
North American Edition

Printing

Printed in the USA.

Quartet Technology, Inc. (QTI) is concerned about the environment. To reduce waste and complete the recycling circle, we printed this manual and cover on stock that is recyclable. QTI has made every effort to look at environmental implications when deciding on packaging.

Copyright

The information in this manual is subject to change without notice and Quartet Technology, Inc. assumes no responsibility for any errors that may appear in this document.

Warranty Information

Warranty

In connection with Products sold and Software licensed by Quartet to the Buyer hereunder, Quartet makes the following warranties, and no others:

(1) Quartet warrants that the Products (excluding, where applicable, any batteries, microphones therein contained, or any portion thereof comprised of Software, which is specifically warranted below) will be free of defects in materials and workmanship for a period of two years from the date of delivery to the Buyer. Quartet's sole responsibility under the aforesaid warranty shall be, at its election, the repair or replacement of defective materials and/or workmanship during the aforesaid period, provided that the Buyer has promptly reported such defect to Quartet and Quartet has found, upon inspection, that such Products are defective. The Buyer must obtain shipping instructions from Quartet prior to returning any Products under warranty. It is the Buyer's responsibility to return the defective Products to Quartet at the Buyer's expense. Ordinary transportation charges back to the Buyer shall be the responsibility of the Buyer, exclusive of duties, tariffs and transportation insurance. All replaced hardware or parts shall become Quartet's property.

(2) Quartet warrants that all unmodified Software will substantially conform, for a period of one year from the date of delivery to the Buyer, to Quartet's published specifications prevailing at the time of shipment. Receipt by Quartet of a written claim under this warranty and the return of the Software must occur within said period. Quartet does not warrant that the Software will be error free or that all errors will be remedied. Quartet's entire liability under this warranty shall be for Quartet to make reasonable efforts to remedy, in a manner deemed suitable to Quartet, any nonconformance reported in writing during the warranty period.

(3) EXCEPT FOR THE WARRANTIES SET FORTH IN THIS SUBSECTION, QUARTET HEREBY DISCLAIMS, TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL OTHER EXPRESS OR IMPLIED WARRANTIES IN RESPECT OF THE PRODUCTS OR THE SOFTWARE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. THE EXPRESS WARRANTIES STATED ABOVE ARE IN LIEU OF ALL OBLIGATIONS AND LIABILITIES OF QUARTET FOR DAMAGES, INCLUDING, WITHOUT LIMITATION, INCIDENTAL CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS OR LOSS OR DESTRUCTION OF DATA), INDIRECT, SPECIAL OR EXEMPLARY DAMAGES THAT ARISE IN ANY WAY OUT OF ANY DEFECTS IN THE PRODUCTS OR SOFTWARE OR IN THEIR MATERIALS OR WORKMANSHIP

Manual Description

Audience

This manual is intended for owners of Simplicity™ Switch, Simplicity™ Voice, and Simplicity™ All-in-One Environmental Control Units (ECU's), and/or others wishing to install the device.

Purpose

The purpose of this manual is to provide:

- An introduction to the ECU
- Installation of the ECU
- Instruction for controlling your environment
- Instruction for connecting the telephone
- Instructions for configuring infrared devices
- Configuration utility instructions
- Information about ECU messages

Intended Use

The intended function of this equipment is to provide those with motor impairments increased control of electrical devices in a home, work, school, hospital, or leisure environment via voice or switch commands.

Prerequisites

Before using your ECU, you should read the *Simplicity All-in-One Owners Manual* (QTI P/N 5084) for detail in the use of your ECU.

The ECU should be installed and configured by an authorized Quartet Technology, Inc. distributor.

Conventions

You'll see the following conventions used in this manual:

- **Bold** font represents commands you issue the ECU
- ***Bold italic*** font represents audio you hear from the ECU

Table of Contents

Chapter 1: Introduction

Overview

Introduction

Congratulations on your purchase of a Simplicity™ Environmental Control Unit (ECU). You have selected a high-quality, highly reliable instrument designed to give you many years of trouble free use. At your spoken or switch command, the Simplicity™ can do a variety of tasks, such as:

- Turn individual lights on or off
- Dim or brighten individual lights
- Turn all lights on or off simultaneously
- Turn appliances on or off
- Dial a phone number or answer a ringing phone
- Answer a call-waiting
- Turn a television on or off, select channels, and adjust the volume
- Control a cable box (on/off, channel up/down, etc.)
- Control other infrared devices such as CD players, stereos, etc.
- Control accessories like page turners and door openers
- Control an electric bed
- Audio link to your computer, intercom, etc.

Despite its sophistication, your new ECU is very simple to operate because you control it with either your voice or a switch. To simplify operation even more, this manual provides step-by-step instructions on installing your unit.

It explains, in simple terms, how to attach and configure a variety of devices to your unit.

Thank you for purchasing a product from Quartet Technology, Inc.

Overview, *continued*

Preface

Before you learn how to install your Simplicity™ Environmental Control Unit (ECU), take a moment to review its components. This chapter describes each component and its function.

Cleaning procedures and maintenance requirements are also described. Also provided is a partial listing of the many accessories available from Quartet.

Objectives

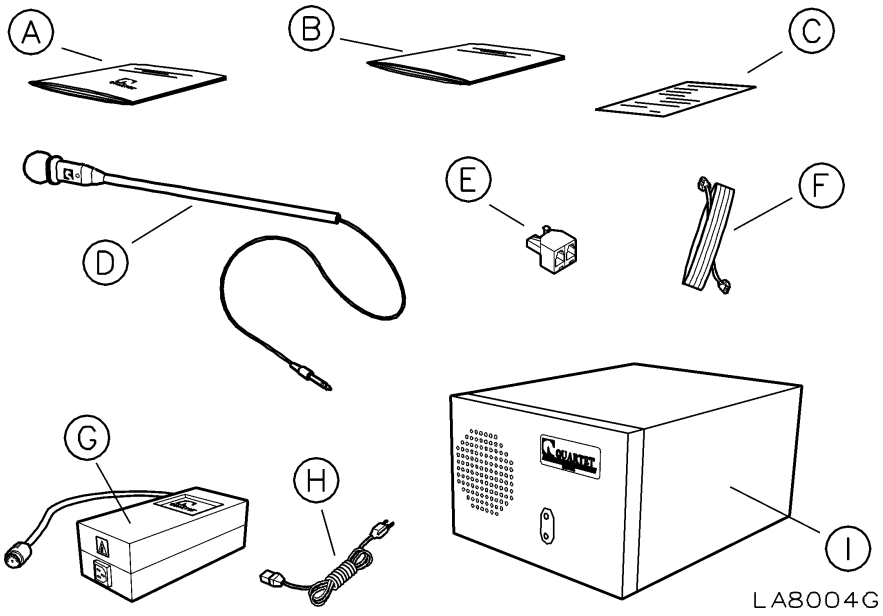
In this chapter you learn about:

- ECU components
- System Unit components
- Safety Symbols
- Regulatory Approvals
- Specifications
- Cleaning and maintenance
- Accessories

ECU Components

Components

The following components comprise the Simplicity™:



Descriptions

Each component is described below:

Letter	Component	Function
A	Installation Manual	Provides instruction on how to install and configure the Simplicity ECU
B	User Manual	Provides instruction on how to use the Simplicity ECU
C	Warranty Card	Warranty registration card
D	Microphone	Used to issue commands to the ECU, or to talk on the telephone
E	Phone Splitter	When connected, allows additional telephones to be plugged in
F	Phone Cord	Connects to the ECU, allowing the use of the telephone
G	Power Supply Unit	When connected, establishes power; use only a harmonized mains cable, (Belden P/N 2104H) or equivalent

continued on next page

ECU Components, *continued*

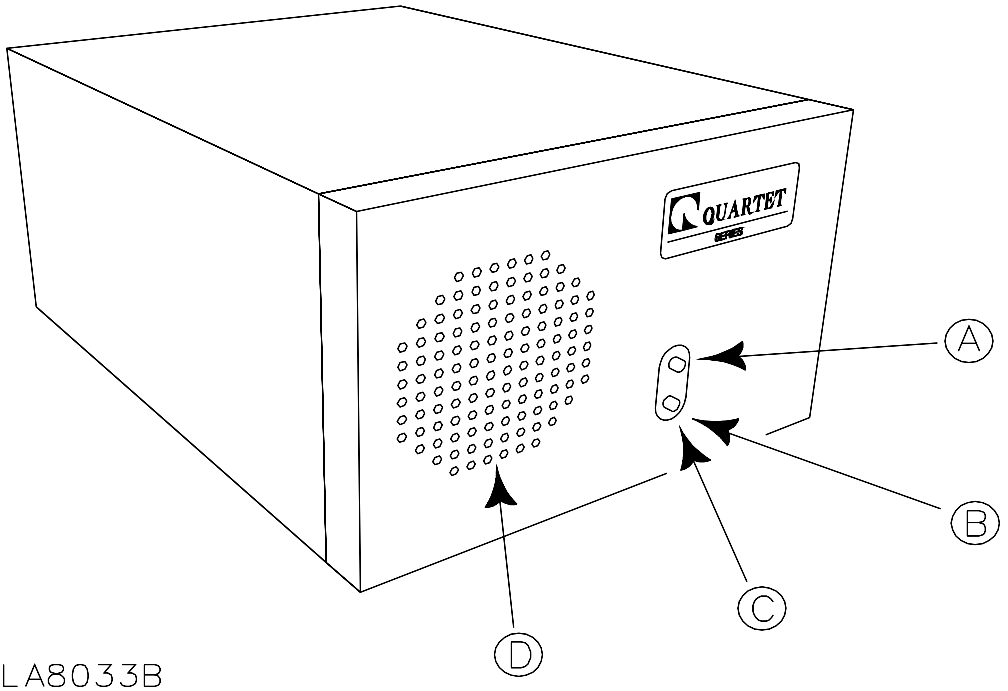
Descriptions, continued

Letter	*Component*	*Function*
H	Mains Cable	Connects the Power Supply Unit to the AC mains; use only a harmonized mains cable, (Belden P/N 2104H) or equivalent
I	System Unit	Also referenced as the ECU, this machine allows you to control your environment

System Unit Components

System Unit front view

Below is a diagram of the front panel of the Simplicity™:



System Unit front view components

The following components are on the front of the All-In-One:

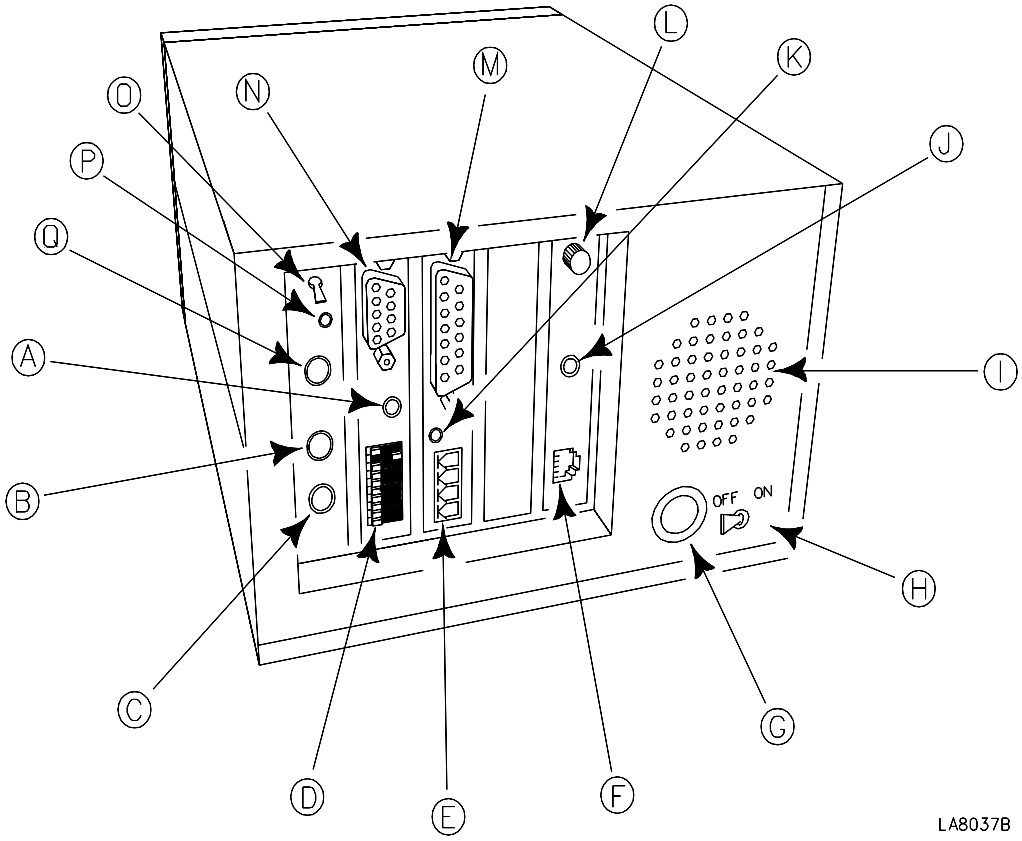
Letter	*Component*	*Function*
A	Infrared Light	Produces an invisible (infrared) beam of light that travels in a straight line, like the beam of a flashlight. This beam controls infrared devices, like a television, cable box, or VCR.
B	Infrared Receiver	This electronic eye "learns" other infrared remote controls.
C	Off-Hook Indicator	An amber light that illuminates ***behind*** the infrared receiver when the telephone is off hook
D	Main Speaker	The ECU audibly responds to spoken commands through this speaker.

continued on next page

System Unit Components, *continued*

System Unit rear view

Below is a diagram of the rear of the Simplicity™:



continued on next page

System Unit Components, *continued*

System Unit rear view components

The following components are on the rear of the Simplicity™:

Letter	*Component*	*Function*
A	Reset Button (Red)	Allows the owner to reset and retrain the unit.
B	Microphone Jack	Where the microphone attaches to the ECU
C	Remote Microphone Jack	Where the wireless remote package plugs into the ECU
D	Dip Switches	Configures the House Code, pulse or rotary telephone dialing, switch operation, etc.
E	Accessory Connector 1 and 2	Attaches optional devices, such as page-turners or door openers. The top two terminals are Accessory Connector 1, and the bottom two terminals are Accessory Connector 2.
F	Modular Phone Jack	Where the phone line plugs into the ECU
G	Power Jack	Where the power supply plugs into the ECU
H	Battery Switch	Activates and deactivates the battery backup
I	Ventilation Holes	Ventilates the ECU. **DO NOT** block these openings.
J	External Speaker Jack	Where optional pillow or remote speakers plug into the ECU
K	External Infrared Jack	Optional cable that repositions infrared line-of-sight around objects
L	Volume Knob	Adjusts the ECU output volume
M	Bed Connector	Connects the optional bed cable to the ECU
N	RS232 Serial Port	QTI Use Only
O	Attendant Switch	Used to advance and select menus and select menu commands

continued on next page

System Unit Components, *continued*

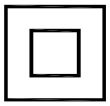
System Unit rear view components, continued

Letter	*Component*	*Function*
P	Audio Output Connector	Connects optional computers, intercoms, or other devices requiring audio line level input
Q	Switch Input	Where any Single or Dual ability switch (such as the Quartet QSP) connects to the ECU. The Simplicity™ comes with a stereo plug inserted in the Switch Input. This plug can be used to solder connections to any Single or Dual switch to if needed.

Safety Symbols

Safety Symbols

The following symbols are on the ECU and/or Power Supply Unit:

Symbol	*Definition*
	Caution, refer to documentation
	Caution risk of electrical shock
	This unit complies with requirements of a Class I device under the Medical Device Directive of 93/42/EEC.
	Class II equipment; the ECU is not earthed.
	Type B applied part
	This ECU complies with the requirements of UL2601-1, 2nd Edition (1997) "Medical Electrical Equipment, Part 1: General Requirements for Safety 2nd Edition Including Amendments 1 and 2". This ECU complies with the requirements of CAN/CSA C22.2 No. 601.1-M90, "Medical Electrical Equipment – Part 1: General Requirements for Safety, including C22.2 No. 601.1S1-94 (IEC601-1, Amendment 1:1991) Supplement No. 1-94 to CAN/CSA 22.2 No. 601.1-M90"

Regulatory Approvals

Safety approvals

This ECU complies with the requirements of UL2601-1, 2nd Edition (1997) "Medical Electrical Equipment, Part 1: General Requirements for Safety 2nd Edition Including Amendments 1 and 2".

This ECU complies with the requirements of CAN/CSA C22.2 No. 601.1-M90, "Medical Electrical Equipment – Part 1: General Requirements for Safety, including C22.2 No. 601.1S1-94 (IEC601-1, Amendment 1:1991) Supplement No. 1-94 to CAN/CSA 22.2 No. 601.1-M90"

This ECU complies with the requirements of EN60601-1:1990, including Amendments A13:1996.

Emissions approval

This ECU complies with the requirements of EMC Directive, number 89/336/EEC, including EN60601-1-2:1993 and EN50065-1.

Telephone approval

This ECU complies with the conditions specified in NTR-3 Issue 2 Annex A.1.2.

In addition, this ECU complies with the requirements of EN60950:1992, Amendment 1 & 2:1993 & Amendment 3:1995, (clause 6; connection to telecommunication networks).

BABT approval

This ECU is approved for connection to telecommunications systems specified in the instructions for use subject to the conditions set out in them.

BABT approval number: 504117

Specifications

Acceptable Input Voltage	110-120VAC, 60Hz, Single Phase
Current	500mA
Input Over Current Protection	Thermal Cutoffs on all legs of primary
Battery Type	Spill proof, maintenance free, sealed lead-acid
Typical Battery Life	1 to 3 years, depending on number of discharge cycles and ambient temperature
Typical Recharge Time	24 hours from total discharge
Operating Temperature	32°F to 104°F (0 to 40°C)
Storage Temperature	5°F to 113°F (-15°C to 45°C)
Operating and Storage Relative Humidity	0 to 95%, non-condensing
Operating Elevation	0 to +10,000ft (0 to +3,000m)
Storage Elevation	0 to +50,000ft (0 to +15,000m)
Size (H x W x D)	5.2” x 7.9” x 10.7” (13.20 x 20.06 x 27.17 cm)
Weight	ECU 11.5lb (5.2kg), PSU 5lb (2.2kg)

Notes:

This equipment is not suitable for use in the presence of a flammable anaesthic mixture with air or with oxygen or nitrous oxide.

This equipment should be protected against ordinary ingress of water.

This equipment is intended for continuous use.

Cleaning and Maintenance

Cleaning

You can clean the outside of the ECU with a slightly damp cloth, when necessary. Use water only.

Maintenance

The Simplicity™ unit requires no special cleaning or daily maintenance, other than the recommended two-year battery replacement. Contact your authorized Quartet distributor for battery replacement and disposal.

You should annually check microphones, switches, and other accessories for safety and integrity. Contact your authorized Quartet distributor for necessary repairs or replacements.

Accessories

Accessories

A complete line of optional accessories complements the Simplicity™, including:

Accessory	QTI P/N	Description
Pillow speaker	8009	Allows for private telephone conversations
Infrared extender	8066	Cable that repositions infrared line-of-sight around objects
QSP pneumatic sip and puff switch	9260	Allows you to control the ECU by switch activation
Lamp module	8013	Allows you to control incandescent lamps
Appliance module	8039	Allows you to control devices (fans, computers)
Radio remote package	9231	Allows you to remotely operate the ECU with voice or switch commands
Radio remote speaker package	9250	Allows you to hear the ECU remotely from your wheelchair.

Contact Quartet Technology or your authorized distributor for more information.

Chapter 2: Installation

Overview

Introduction

Your Simplicity ECU is easy to install and setup. To start using your ECU in minutes, just follow the instructions outlined in this chapter.

Objectives

In this chapter you learn about:

- Plugging in the microphone
- Adjusting the volume
- Plugging in the ability switch
- Setting the dipswitches
- Setting up the lamp module
- Connecting a lamp
- Connecting the power supply
- Turning the battery back-up on
- Voice training

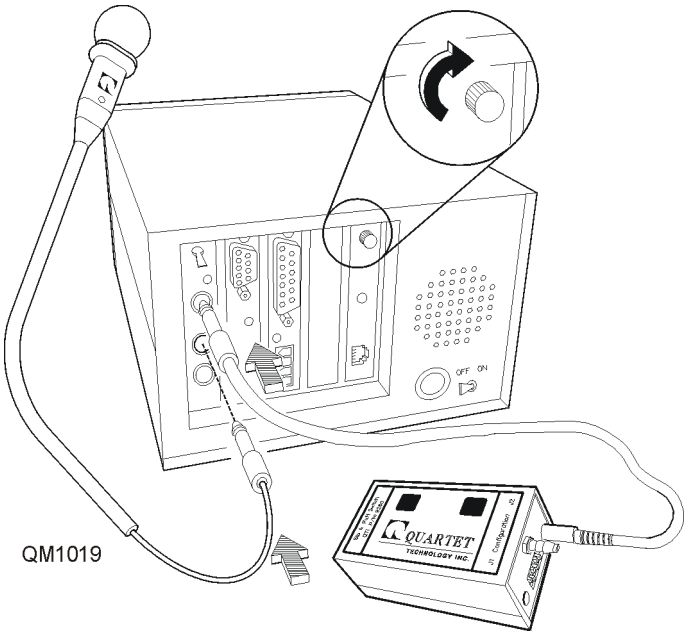
Connecting the Microphone and Switch

Procedure

1. Identify the microphone that came with the ECU and attach it to the "Microphone" jack as shown.

2. Turn the volume up (clockwise) about halfway.

3. Plug the ability switch (1/4" jack) you have chosen into the "Switch Input" jack as shown.



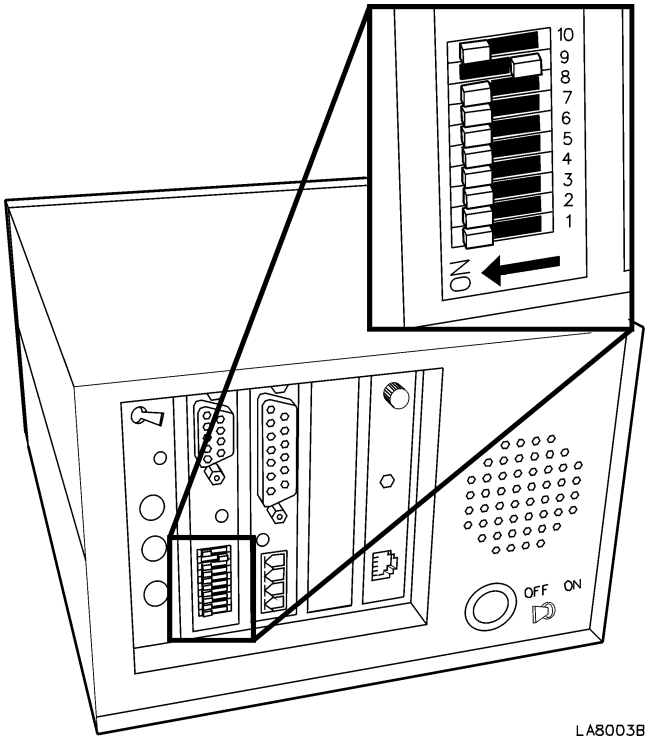
Note: *Do not plug the unit into an electrical outlet at this point.*

continued on next page

Setting the Dipswitches

Procedure

1. Set the dipswitches located on the back of the unit.



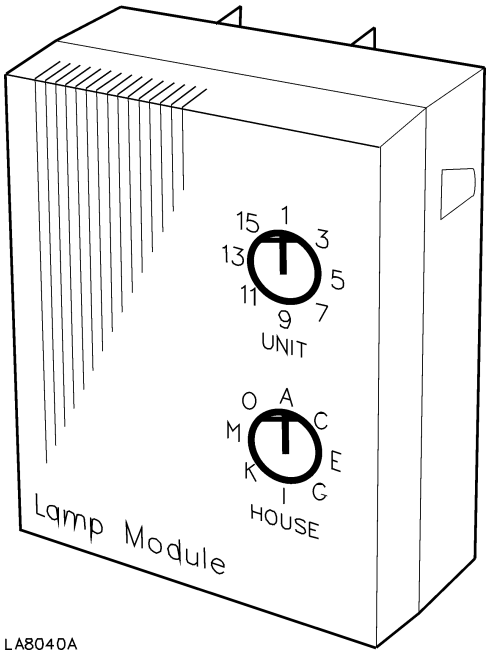
***Note**: The figure above illustrates a unit that is set for House Code A, tone dialing, and voice/switch operation.*

continued on the next page

Setting up the Lamp Module

Procedure

Using a small Flathead screwdriver, set the Unit number on the Lamp Module to 1 and the House Code to A.



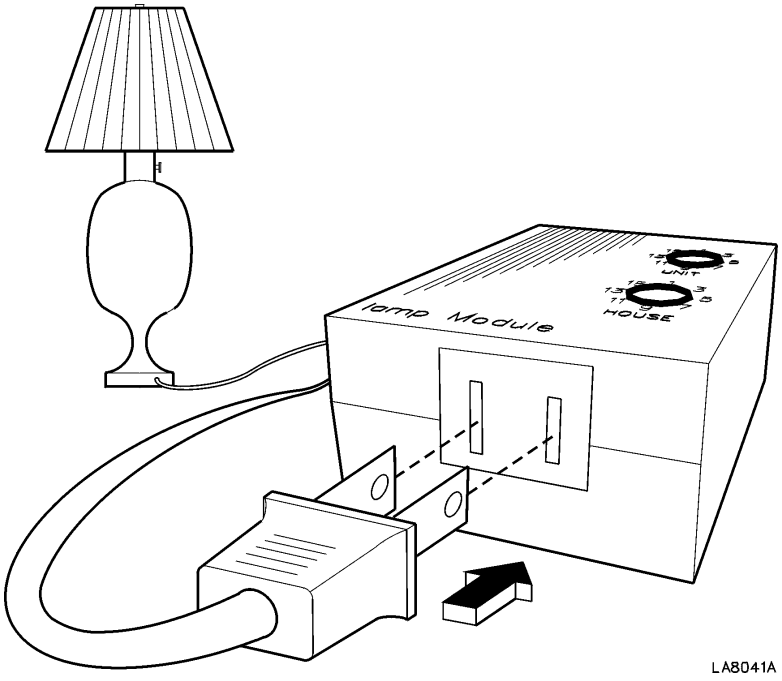
continued on next page

Connecting a Lamp

Procedure

Connect a lamp to the lamp module as follows:

1. Plug a lamp into an electrical outlet and turn it on; verify that the light is on
2. Unplug the lamp from the electrical outlet
3. Plug the lamp into the lamp module

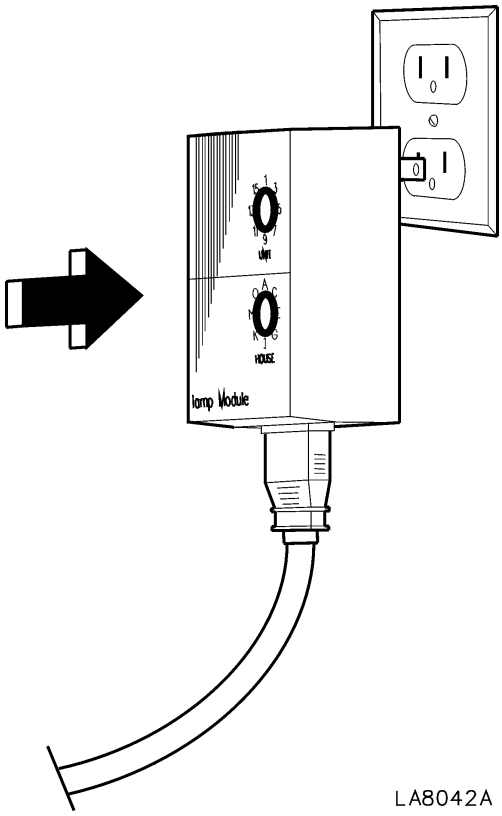


Note: *Do not force the line cord into the module.*

continued on next page

Connecting a Lamp, *continued*

4. Plug the lamp module into an electrical outlet.



Note: *The lamp must stay switched **ON**. Other family members can control any lamp or appliance module using the optional push-button mini controller (QTI P/N 8084).*

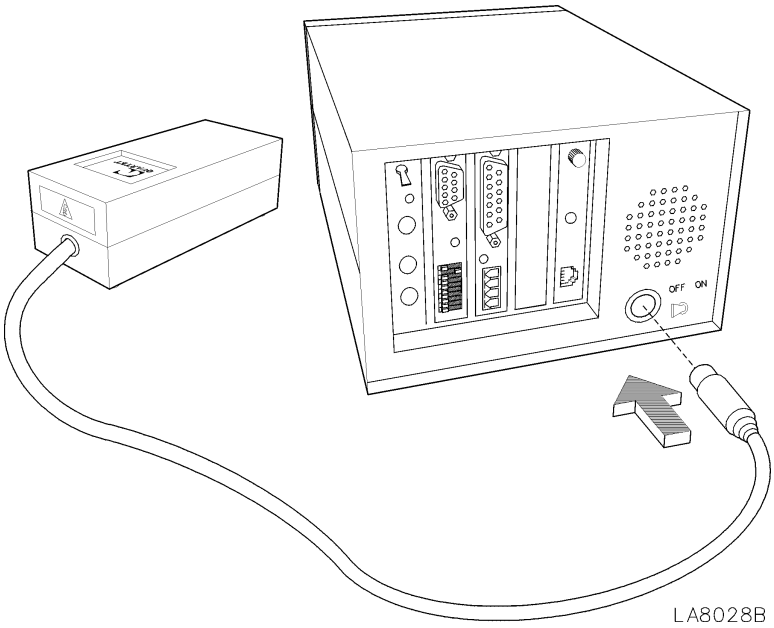
Note: *Do not use any type of surge suppression between the module and the electrical outlet. This will cause the module to behave erratically.*

Note: *Lamp modules can only be used with incandescent lamps.*

continued on next page

Connecting the Power Supply

Plug the Power Supply into the ECU.

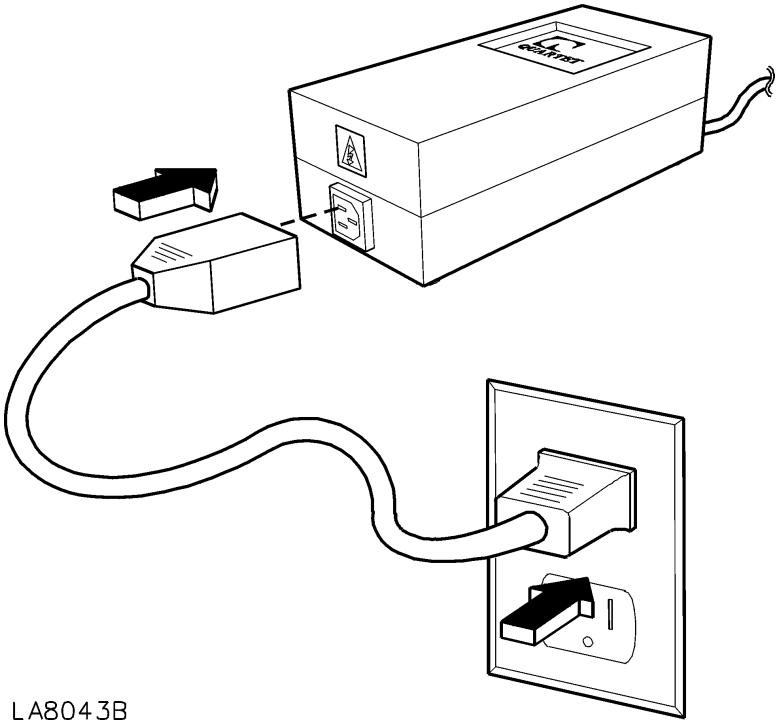


Note: *Be sure to plug the connector firmly into place.*

continued on the next page

Connecting the Power Supply, *continued*

Plug the power supply cord into an electrical outlet.



LA8043B

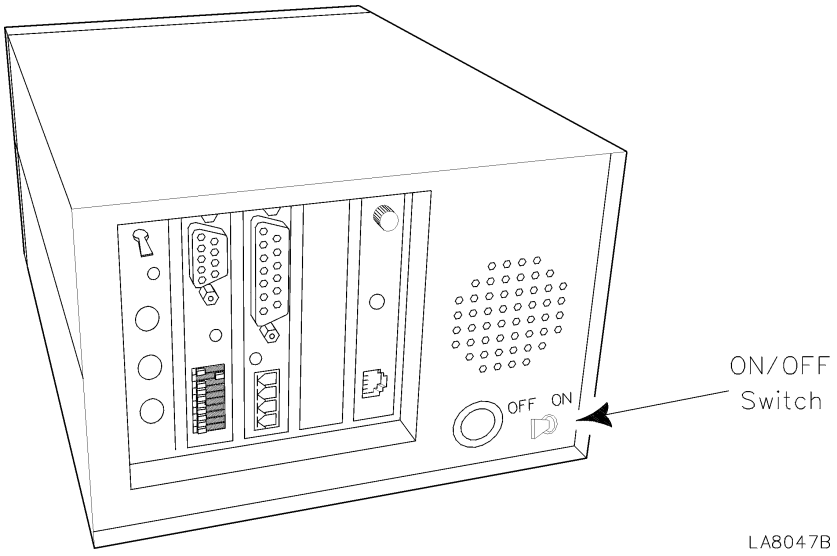
Note: *After performing self-diagnostics, the ECU will ask you to say the word "Testing." Do not say anything; proceed to the next section, Voice Training, before responding.*

Note: *If the ECU responds with something other than "Say Testing", refer to Appendix A, "ECU Messages".*

continued on next page

Turning the Battery Back-up On

Turn the On/Off switch ***On*** to activate the battery charger inside the ECU.



Note: *This switch should* ***always*** *be set to the* ***On*** *position except when the ECU will be off for an extended period of time. The battery backup* ***will not work*** *if the switch is in the off position and if there is a power failure.*

continued on next page

Voice Training

Introduction

When using the voice mode, the ECU operates on a sequence of voice commands. You must train the unit to recognize your voice before it can respond to your commands. Before you begin to train your unit, it is important to keep the following points in mind when speaking into the microphone:

- Your voice volume and word pronunciation should always be the same.
- Speak in a clear flat voice. Try to leave any emotion out of your voice. For example, when asked to say "Yes" don't say "Yes?" as if you were asking a question. Be firm and say, "Yes."
- When the ECU asks you to say a word, take your time. Repeat the word to yourself before speaking into the microphone. **Stop** for a brief pause after each word, the ECU will wait.
- If you make a mistake, don't worry. Stop, collect yourself and continue. Later we will show you how to correct a misspoken word.
- You must speak directly into the front of the microphone. Your mouth should be **no more** than 1-inch away from the microphone.

The ECU will expect you to say these words the same way every time, so repeat them the way you normally would. Take your time and don't rush.

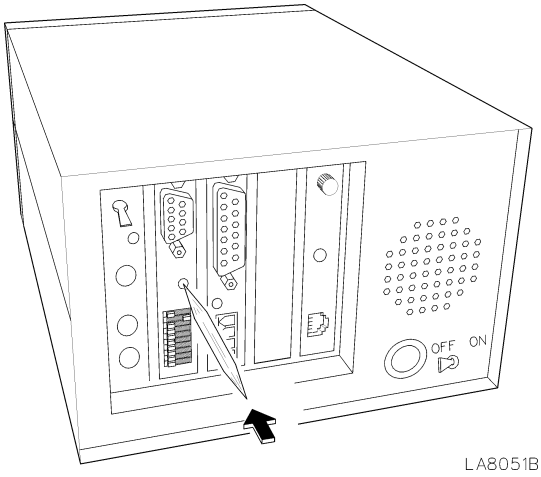
continued on next page

Voice Training, *continued*

Procedure

You are now ready to begin voice training your ECU.

1. Press the red button located on the rear of the unit.



2. The ECU should respond with either "single" or "dual" switch. If the unit does not, check to make sure you have plugged the ability switch all the way in.

   Note: *If you have purchased the optional radio remote package, it* ***should not*** *be connected to the ECU at this time.*

3. The ECU will then ask you to say the word "Testing". Pause, and then say "Testing" into the microphone. It will repeat this command until it adjusts to the volume of your voice. **Do not change the volume of your voice**. Pick a comfortable volume and stay with it. **Take your time!!**

   Note: *The first "say Testing" may have to be spoken loudly in order to "wake-up" the unit. After this, always speak to the unit at the same firm level.*

Pause here for a moment.....

continued on next page

Voice Training, *continued*

"The Name"

The ECU will ask you to say "the name". The ECU is asking for the name of your Simplicity ECU. You can name your Simplicity ECU whatever you wish. It is best, however, if the name you choose does not sound like a word used in conversation. Try an uncommon name like Egbert, Calvin, or Victor. Stay away from long and complicated names (i.e., Montezuma) because they may get tiring after awhile. Hard guttural words work best.

During training when the ECU asks you to say a word, you will repeat that word into the microphone except when the ECU asks you to say "the Name". At this point, you say Egbert, Calvin, Victor, or whatever name you have chosen.

Training

The ECU will now ask you to say a series of words.

Note: *Appendix B contains a complete listing*

After you have completed repeating all the words, you will hear the sound of three clicks. This confirms that you have successfully trained your ECU to recognize the words you repeated. You can now turn on your lamp through the use of voice commands.

continued on next page

Turning on a lamp by voice or switch

Introduction

Most commands use the three steps below to perform a function.

Voice Mode

1. Call the units name. (Egbert, Calvin, etc..)
2. Choose a menu function. (Light, Telephone, Bed, etc..)
3. Give a command. (Allon, Shutoff, Up, etc..)

Switch Mode

1. Activate the unit using the ability switch you have chosen.
2. Choose a menu function. (Light, Telephone, Bed, etc..)
3. Choose a command. (Allon, Shutoff, Up, etc..)

Activate a lamp

You can turn on all your lamp modules by activating the unit, choosing a menu (Light), followed by a command (Allon).

Now it is your turn to try. To turn on your lamp do the following:

Voice Mode Say: "**Egbert**", "**Light**", "**Allon**"

Switch Mode Activate the unit, select "**Light**", and select "**Allon**"

Congratulations! You have just entered the world of environmental control!

Chapter 3: Controlling your environment

Overview

Voice Commands

You train the Simplicity™ to respond to a sequence of spoken words. These voice commands are made up of the same words you trained in Chapter 2. The examples in this chapter refer to the Simplicity™ as "Egbert". To activate "Egbert", you must first say its name. "Egbert" can now respond to any command sequence.

Voice Example

To turn on a light, first say: "**Egbert**". "Egbert" responds by saying, "***Yes***?"

Then say: "**Light**". "Egbert" responds by saying "***Light***".

Say "**Allon**". "Egbert" responds by saying "***Allon***". The ECU will repeat the word it understood you to say. You can turn this "echo" feature off later if you wish.

Until you memorize the sequences of commands and have learned to pronounce your words the same way, remember:

- If you forget a command or if "Egbert" keeps saying, "***Excuse me***", just say "**Help-me**". "Egbert" responds with a list of commands you can choose from.
- At any time you can say, "Cancel" to stop the whole process. Say the name ("Egbert") to activate the unit again.
- You must always pronounce words exactly the same way. For example, if you train "Egbert" to recognize "Turnon" in a flat voice and you say "Turnon?" with a rise at the end, "Egbert" responds with "Excuse me?" It cannot recognize different pronunciations of the same word.

Note: *If "Egbert" keeps saying, "Excuse me?" and does not respond to a different pronunciation of the word, say "Helpme". You may be using the wrong command.*

continued on next page

Overview, *continued*

Switch Commands

The ECU operates upon activation from an ability switch you have chosen attached to the unit.

If you are using a "dual" switch, one side of the switch will activate the unit and cause it to begin scanning through the menus (called the "Advance" side). The other side of the switch (when activated) will select the current menu choice (called the "Select" side).

If you are using a "single" switch, activating the switch once will cause the unit to start scanning the menus. Activating the switch *again*, will select the current menu choice.

The speed at which the unit verbally outputs the menu choices is configurable. *(See Owner's Manual, Chapter 3*) When using a "dual" switch, the menu speed delay can be overridden by continuously activating the "Advance" side.

As with the menu speed, the "switch" speed (sometimes called the switch acceptance rate) is also configurable. *(See Owner's Manual, Chapter 3*)

Another unique feature of the Simplicity™ is the ability to "customize" entire menu groups or selected commands within a menu group. *(See Owner's Manual, Chapter 3*)

After activating your Simplicity with your ability switch, you have your choice of the following menus:

- Phone
- Light
- Appliance
- Television
- Cable
- VCR
- Remote 1
- Remote 2
- Remote 3
- Bed
- Accessory
- Utility
- Cancel

Overview, *continued*

Switch Example

To turn on a light, activate the ability switch.

The ECU will start verbally scanning by saying, "***Phone***", "***Light***", ….

When the ECU says "***Light***", activate the ability switch again.

The ECU will start verbally scanning the "Light" menu by saying, "***Turnon***", "***Shutoff***", ….

When the ECU says "***Allon***", activate the ability switch again.

Chapter 4: Configuring the House Code

Overview

Introduction

The Simplicity™ can control up to 32 compatible X-10™ modules. Using the Light (or Appliance) menu you can:

- Turn on all lamp modules simultaneously
- Shut off all modules simultaneously
- Turn on or shut off a particular module(s)
- Brighten or dim any lamp module(s)
- Activate a remote chime module
- Control a thermostat module
- Control a wall switch module

Objectives

In this chapter you will learn about:

- Configuring House Code setting

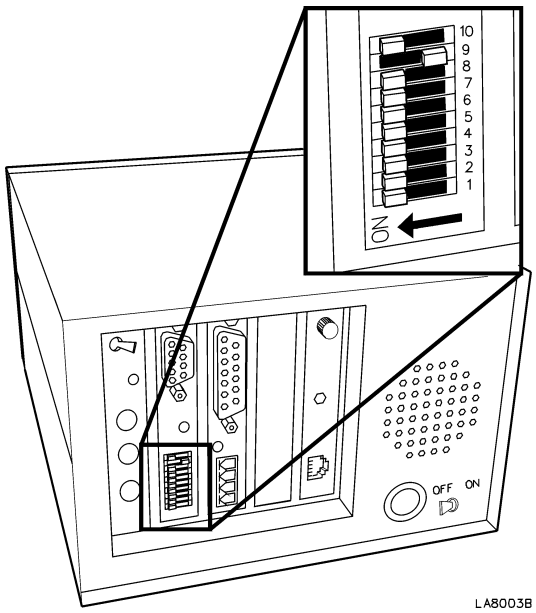
Configuring the House Code

House Code

Control modules use a House Code and a Unit Code. Select the same House Code for every module in your house. Select a unique Unit Code for each module.

Your Simplicity™ is factory set to House Code "A" for the "Light" menu, and "B" for the appliance menu. You should not have to change this setting unless someone nearby also uses X-10 devices.

To change the House Code, locate the dipswitches on the back of the unit.



Use the information in the following table to configure dipswitches 1 through 4.

continued on next page

Configuring the House Code, *continued*

House Code Table

Light Menu House Code	*Appliance Menu House Code*	*Dipswitch 1*	*Dipswitch 2*	*Dipswitch 3*	*Dipswitch 4*
A	B	On	On	On	On
B	C	On	On	On	Off
C	D	On	On	Off	On
D	E	On	On	Off	Off
E	F	On	Off	On	On
F	G	On	Off	On	Off
G	H	On	Off	Off	On
H	I	On	Off	Off	Off
I	J	Off	On	On	On
J	K	Off	On	On	Off
K	L	Off	On	Off	On
L	M	Off	On	Off	Off
M	N	Off	Off	On	On
N	O	Off	Off	On	Off
O	P	Off	Off	Off	On
P	P	Off	Off	Off	Off

***Note**: The appliance House Code is automatically assigned. For example, if you configure dip switches 1 through 4 to Off, On, Off, On, respectively, then the House Code for the "Light" menu will be "K" and the House Code for the "Appliance" menu will automatically be set to "L".*

X-10 Groups

The Simplicity™ uses two menus for controlling X-10™ modules: Light and Appliance. Both these menus are functionally identical. Each menu is capable of controlling up to sixteen modules. There are a wide variety of modules available to control many items. Any module can be used in either menu group.

In addition, there are another two sub-menus in the Accessory menu that are capable of controlling up to sixteen modules each. This brings the total number of X-10™ modules that can be controlled to 64. Refer to Chapter 10, "*Accessory Control*" for details on configuring these additional groups.

Chapter 5: Connecting the Telephone

Overview

Introduction

The Simplicity™ contains a full featured, integrated, high quality telephone with ringer. The phone menu is one of the most powerful tools within the unit.

Whether by switch, voice, or the optional remote package, you can communicate on the telephone from anywhere in your environment as well as perform all other ECU functions.

Some of the many telephone features are:

- Answer or hang-up the phone
- Answer a "call waiting"
- Dial a random telephone number
- Redial the last telephone number automatically
- Put a caller on "hold"
- Choose to have a "private" conversation
- Store up to 100 telephone numbers
- "Speed dial" up to 100 telephone numbers
- Enter up to 35 digits per speed dial location
- Nonvolatile memory storage
- Change the telephone listening volume
- Review any stored telephone number
- Quick Dial™ - Navigate voice mail systems (voice only)
- Turn the telephone ringer on or off
- Perform other ECU functions while on the telephone
- Automatically places callers on hold when accessing other ECU functions
- Phone is fully functional during power outages
- Built in surge protection
- X-10™ Off-Hook Indicator

Objectives

In this chapter you will learn about:

- Connecting the ECU to the telephone line

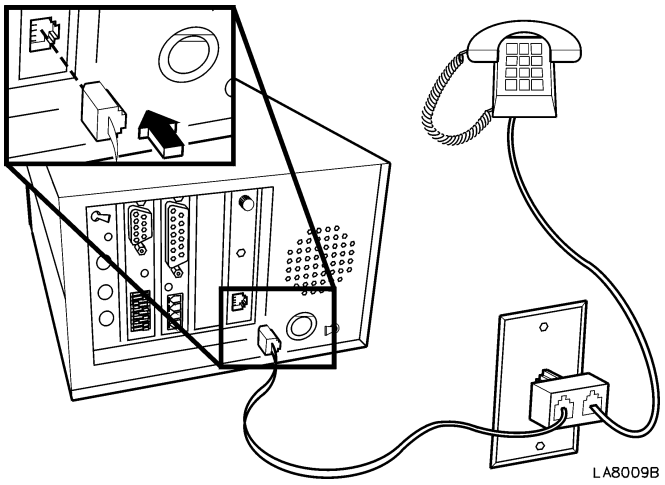
Connecting the Telephone Line

Introduction

Once you connect your Simplicity™ unit to a telephone line, you can use switch or voice commands to access any of the above-mentioned features.

Procedure

1. Connect one end of the six-foot telephone cable (supplied) to the phone jack on the back of the Simplicity™ unit.



2. Disconnect the current telephone (if there is one) from the wall.

3. Install telephone "splitter" into wall jack.

4. Connect both the Simplicity and (optionally) your existing phone into the "splitter" as shown.

***Note**: The Simplicity does not need to have an external telephone for operation.*

5. Be sure both ends of the telephone cable "snap" and lock into place.

6. Locate dipswitch number 5 on the back of the Simplicity. Slide the switch to "Off" if you have rotary dial service, "On" (factory setting) if you have tone dial service. Pulse dialing is not selectable in countries that do not support pulse dialing.

X-10 Off-Hook Indicator

Definition

The X-10 off-hook indicator option allows you to:

- Turn on an X-10 module automatically when the phone is answered
- Shut off an X-10 module automatically when the phone is hung-up

Note

The module used for this feature must be set to P-16. Refer to Chapter 2, *"Installation", "Setting up the Lamp Module"*, for details on how to set the house and unit code for the module.

Procedure

To configure your ECU to enable the X-10 off-hook option, select [say] the following:

Enable X-10 Option

[Egbert]-Utility-Two-Four

You are now prompted with:

"Deleted"

Select [say] "Turnon".

The X-10 off-hook option is now enabled.

Disable X-10 Option

[Egbert]-Utility-Two-Four

You are now prompted with:

"Enabled"

Select [say] "Shutoff".

The X-10 off-hook option is now deleted.

Chapter 6: Television Codes

Overview

Introduction

The Simplicity can be configured to control ***most*** televisions. Using the television menu you can:

- Turn on or off the television
- Change the volume
- Change the channels
- Mute the volume
- Toggle between two channels
- Operate specially configured keys

Objectives

In this chapter you will learn about:

- Entering a 3 digit brand code

Configuring the Television Menu

Brand Codes

Before operating your television with switch or voice commands, you must first configure your ECU to recognize your television. To operate a television, which uses a remote control, first find your TV brand code listed in Appendix C.

Many of the brands listed have multiple codes. When more than one code is available, enter the codes in the order listed until the television responds correctly.

If none of the codes listed works, the ECU will have to "learn" the remote control that came with the television. Refer to Chapter 14, "Learning Infrared".

Note

The Simplicity can only operate televisions which already use a remote control. It cannot operate a television that is not remote control ready.

Procedure

To train your ECU to recognize your TV brand code, select [say] the following:

[Egbert]-Utility-Television

***Note**: Three digit television brand codes can only be used in the "Television" or "Remote 1" menu groups.*

You are now prompted with the question:

"*Do you want to enter a three digit number?*"

Select [say] "**Yes**". You are now prompted with:

"*Say the first digit.*"

Select [say] the first digit of your TV code. After you select [say] the first digit, the ECU will repeat it to verify it heard it correctly and ask you to:

"*Say the second digit.*"

Select [say] the second digit of your TV code.

continued on next page

Configuring the Television Menu, *continued*

After you select [say] the second digit, the ECU will repeat it to verify it heard it correctly and ask you to:

"*Say the third digit.*"

Select [say] the third digit of your TV code. After you select [say] the third digit, the ECU will repeat it to verify it heard it correctly. After a short delay (approximately 30 seconds), the unit will respond with:

"*Training Complete.*"

You will hear three clicks signifying you have successfully trained the unit to recognize your TV brand code. You are now ready to proceed to controlling your TV using switch or voice commands.

Note

Before you can operate your television, make sure the front of the Simplicity is facing your television and is within 15 to 20 feet of it. Make sure nothing is blocking the ECU's view of your television.

Chapter 7: Cable Codes

Overview

Introduction

The Simplicity can be configured to control ***most*** cable boxes. Using the cable menu you can:

- Turn on or off the cable box
- Change the volume
- Change the channels
- Mute the volume
- Toggle between two video inputs
- Operate specially configured keys

Objectives

In this chapter you will learn about:

- Entering a 3 digit brand code

Configuring the Cable Menu

Brand Codes

Before operating your cable box with switch or voice commands, you must first configure your ECU to recognize your cable box. To operate a cable box, which uses a remote control, first find your cable box brand code listed in Appendix D.

Many of the brands listed have multiple codes. When more than one code is available, enter the codes in the order listed until the cable box responds correctly.

If none of the codes listed works, the ECU will have to "learn" the remote control that came with the cable box. Refer to Chapter 14, "Learning Infrared".

Note

The Simplicity can only operate cable boxes which already use a remote control. It cannot operate a cable box that is not remote control ready.

Procedure

To train your ECU to recognize your cable box brand code, select [say] the following:

[Egbert]-Utility-Cable

***Note**: Three digit cable box brand codes can only be used in the "Cable" or "Remote 2" menu groups.*

You are now prompted with the question:

"*Do you want to enter a three digit number?*"

Select [say] "Yes". You are now prompted with:

"*Say the first digit.*"

Select [say] the first digit of your cable box code. After you select [say] the first digit, the ECU will repeat it to verify it heard it correctly and ask you to:

"*Say the second digit.*"

Select [say] the second digit of your cable box code.

continued on next page

Configuring the Cable Menu, *continued*

After you select [say] the second digit, the ECU will repeat it to verify it heard it correctly and ask you to:

"Say the third digit."

Select [say] the third digit of your cable box code. After you select [say] the third digit, the ECU will repeat it to verify it heard it correctly. After a short delay (approximately 30 seconds), the unit will respond with:

"Training Complete."

You will hear three clicks signifying you have successfully trained the unit to recognize your cable box brand code. You are now ready to proceed to controlling your cable box using switch or voice commands.

Note

Before you can operate your cable box, make sure the front of the Simplicity is facing your cable box and is within 15 to 20 feet of it. Make sure nothing is blocking the ECU's view of your cable box.

Chapter 8: VCR Codes

Overview

Introduction

The Simplicity can be configured to control ***most*** VCR's. Using the VCR menu you can:

- Turn on or off the VCR
- Play a video tape
- Record a video tape
- Rewind a tape
- Fast forward a tape
- Pause a tape
- Stop a tape
- Change the volume
- Change the channels
- Toggle between TV and VCR modes
- Operate specially programmed keys

Objectives

In this chapter you will learn about:

- Entering a 3 digit brand code

Configuring the VCR Menu

Brand Codes

Before operating your VCR with switch or voice commands, you must first configure your ECU to recognize your VCR. To operate a VCR, which uses a remote control, first find your VCR brand code listed in Appendix E.

Many of the brands listed have multiple codes. When more than one code is available, enter the codes in the order listed until the VCR responds correctly.

If none of the codes listed works, the ECU will have to "learn" the remote control that came with the VCR. Refer to Chapter 14, "Learning Infrared".

Note

The Simplicity can only operate VCR's which already use a remote control. It cannot operate a VCR that is not remote control ready.

Procedure

To train your ECU to recognize your VCR brand code, select [say] the following:

[Egbert]-Utility-VCR

***Note**: Three digit VCR brand codes can only be used in the "VCR" or "Remote 3" menu groups.*

You are now prompted with the question:

"*Do you want to enter a three digit number?*"

Select [say] "Yes". You are now prompted with:

"*Say the first digit.*"

Select [say] the first digit of your VCR code. After you select [say] the first digit, the ECU will repeat it to verify it heard it correctly and ask you to:

"*Say the second digit.*"

Select [say] the second digit of your VCR code.

continued on next page

Configuring the VCR Menu, *continued*

After you select [say] the second digit, the ECU will repeat it to verify it heard it correctly and ask you to:

"Say the third digit."

Select [say] the third digit of your VCR code. After you select [say] the third digit, the ECU will repeat it to verify it heard it correctly. After a short delay (approximately 30 seconds), the unit will respond with:

"Training Complete."

You will hear three clicks signifying you have successfully trained the unit to recognize your VCR brand code. You are now ready to proceed to controlling your VCR using switch or voice commands.

Note

Before you can operate your VCR, make sure the front of the Simplicity is facing your VCR and is within 15 to 20 feet of it. Make sure nothing is blocking the ECU's view of your VCR.

Chapter 9: Bed Cable Installation

Overview

Introduction

The Simplicity contains a built-in electric bed controller. Using the bed menu you can:

- Raise or lower the bed
- Raise or lower the foot
- Raise or lower the head

Once the bed cable is connected, you can use voice or switch commands to access any of the above-mentioned features.

Objectives

In this chapter you will learn about:

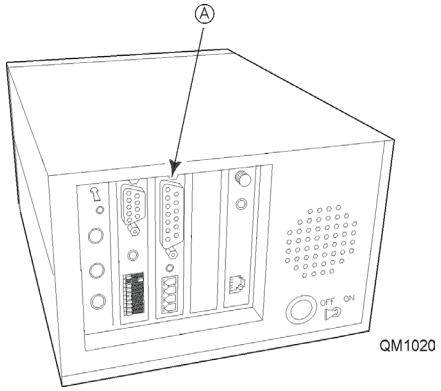
- Installing the optional bed cable
- Configuring the consecutive access option (switch only)

Installing the Bed Cable

Procedure

The optional bed cable consists of a 20-foot cable with a "Y" connection on one end. To connect your bed cable:

- Connect one end of the bed cable to the Bed Connector on the back of the Simplicity unit shown as “A” below.



- Unplug the existing hand pendent controller from the bed.
- Plug one side of the "Y" on the bed cable into the bed.
- Plug the existing hand pendent into the other side of the "Y" on the bed cable.

Note

The Simplicity can only operate ***low voltage*** beds whose hand pendants support the above features. It cannot control the bed if the bed manufacturer does not offer the function.

Caution

Only **low voltage, low current** devices should be connected to the switch terminals. **Do not switch AC line voltages**. The maximum rating for the accessory port switches is 30 VDC, or 30 VAC at a maximum current of .5 Amps.

Caution

All cabling should be properly secured to prevent damage to the cables and/or ECU.

Consecutive Access Option

Definition

The consecutive access option allows you to:

- Change the number of times (from one to four) you can adjust the movement of the bed, up or down, using a switch. The factory default is two.

Note

The consecutive access option is intended to prevent a switch user from raising or lowering the head, foot, or mattress of the bed more then a pre-determined number of times in any one direction.

This feature prevents unintended operation of the of the bed in the event of a switch failure.

Note

The ***length*** of time the bed moves cannot be changed.

Procedure

To configure your ECU to change the number of consecutive accesses, select [say] the following:

[Egbert]-Utility-Keyboard-Two-Eight

You are now prompted with:

"Two" (factory default)

Select [say] a number from “1” to “4”

Chapter 10: Accessory Control

Overview

Introduction

The Simplicity provides control of standard accessories such as door openers, page-turners, drapery controls, nurse calls, etc. When selected by switch or verbal command, the chosen Accessory port, 1 or 2, will momentarily be closed.

The Accessory menu also contains two optional X-10 menus that can be enabled to provide additional control for 32 modules.

Objective

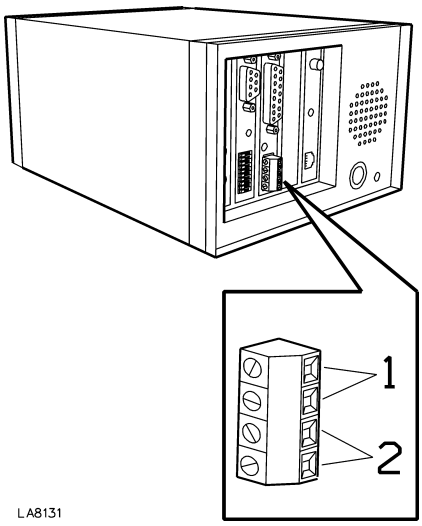
In this chapter you will learn about:

- Location of Accessory ports 1 and 2
- Attaching an accessory to the ECU
- Configuring the “on time” for each accessory port
- Configuring “loop” option
- Configuring addition X-10 menus

Configuring the Accessory Ports

Port Identification

The illustration below identifies the Accessory connector. Note that the top two terminals belong to "Accessory 1" and the bottom two terminals belong to "Accessory 2". These two terminals function just like a doorbell button. When selected, the terminals are momentarily connected to each other.



Warning

ONLY LOW VOLTAGE, LOW CURRENT DEVICES SHOULD BE CONNECTED TO THE SWITCH TERMINALS. DO NOT ATTEMPT TO SWITCH AC LINE VOLTAGES!

Note

The maximum rating for the accessory ports switches is 30 VDC or 30 VAC at a maximum current of .5 Amps.

continued on next page

Configuring the Accessory Ports, *continued*

Note

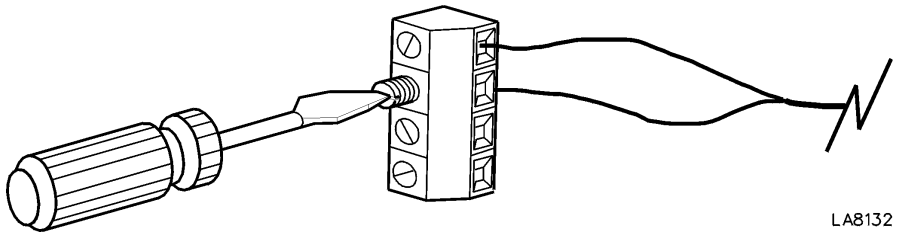
Most accessories use 5 to 12 volts to make them operate. These can be easily handled by the Simplicity. However, the Simplicity is not designed for high current or high voltage AC. You cannot, for example, use the Accessory connector to switch a light on and off.

If you have any doubts about hooking up an accessory, contact the manufacturer of the accessory you wish to control, or have a qualified, licensed electrician perform the installation.

Attaching an Accessory

To connect an accessory to one of the accessory ports, unplug the green accessory connector from the back of the ECU.

Using a small Flathead screwdriver, unscrew the setscrews in the accessory connector (either 1 or 2) counter-clockwise.



Take one of the two wires used to control the accessory device and insert it into one side of the accessory connector. Take the other wire and insert it into the other side of the accessory connector.

Using a small Flathead screwdriver, screw the setscrews into the accessory connector (either 1 or 2) clockwise. Do not over tighten!

Remember, that the top two terminals belong to "Accessory 1" and the bottom two terminals belong to "Accessory 2".

Configuring the Accessory Ports, *continued*

On Times

The "on time" (closed time) for Accessory 1 and 2 can be individually set. This time can be adjusted from approximately .5 seconds to 8 seconds, in .5 second increments.

Configuring Accessory 1 "On Time"

To configure the "on time" for accessory one, select [say] the following:

[Egbert]-Utility-Keyboard-One-Eight

***Note**: After selecting [saying] "Keyboard", the unit will respond with "Say cancel". If you wish to exit, select [say] "Cancel". Otherwise, ignore this message and continue.*

The ECU will verbally respond with the current setting:

"***(Number)***" (The factory default is 1 second.)

Choose a number from 1 (minimum) to 16 (maximum). The new hold time is now entered. Remember that each number represents approximately .5 seconds. Thus, entering 5 would cause Accessory 1 to close for approximately 2.5 seconds when activated.

Example

Task	*Say:*	*ECU Response*
Change Accessory 1 "On Time" from 1 second (default) to 16 seconds	**Egbert** **Utility** **Keyboard** **One** **Eight** **Sixteen**	 ***One***

continued on next page

Configuring the Accessory Ports, *continued*

Configuring Accessory 2 "On Time"

To configure the "on time" for accessory two, select [say] the following:

[Egbert]-Utility-Keyboard-One-Nine

***Note**: After selecting [saying] "Keyboard", the unit will respond with "Say cancel". If you wish to exit, select [say] "Cancel". Otherwise, ignore this message and continue.*

The ECU will verbally respond with the current setting:

"***(Number)***" (The factory setting is 1 seconds.)

Choose a number from 1 (minimum) to 16 (maximum). The new hold time is now entered. Remember that each number represents approximately .5 seconds. Thus, entering 5 would cause Accessory 2 to close for approximately 2.5 seconds when activated.

Example

Task	*Say:*	*ECU Response*
Change Accessory 2 "On Time" from 1 second (default) to 16 seconds	**Egbert** **Utility** **Keyboard** **One** **Nine** **Sixteen**	 ***One***

Looping

Both Accessory ports 1 and 2 can be configured to loop or not. When looping is configured for an accessory port, you can activate the Accessory port contact again and again by selecting [saying] "x", where "x" is the accessory number.

If looping is enabled, you must specify **Cancel** to exit the menu.

The factory default for Accessory 1 is looping *deleted*. The factory default for Accessory 2 is looping *enabled*.

Configuring Additional X-10 Menus

Definition

There are two sub-menus in the Accessory menu that are capable of controlling up to sixteen modules each. These sub-menus are called “Light” and “Appliance”. This brings the total number of X-10™ modules that can be controlled by the ECU to 64.

Objective

In this section you will learn about:

- Enabling and deleting the additional “Light” menu.
- Enabling and deleting the additional “Appliance” menu
- Configuring house codes for these two menus

Procedure

To configure your ECU to enable the additional X-10 menus, select [say] the following:

Enable Additional Light Menu

[Egbert]-Utility-Keyboard-Three-Five

You are now prompted with:

"Deleted”

Select [say] "Turnon".

The additional Light menu is now enabled.

Delete Additional Light Menu

[Egbert]-Utility-Keyboard-Three-Five

You are now prompted with:

"Enabled”

Select [say] "Shutoff".

The additional Light menu is now deleted.

Configuring Additional X-10 Menus (cont.)

Enable Additional Appliance Menu

[Egbert]-Utility-Keyboard-Three-Seven

You are now prompted with:

"Deleted"

Select [say] "Turnon".

The additional Appliance menu is now enabled.

Delete Additional Appliance Menu

[Egbert]-Utility-Keyboard-Three-Seven

You are now prompted with:

"Enabled"

Select [say] "Shutoff".

The additional Appliance menu is now deleted.

Configuring the House Codes

Definition

There are two sub-menus (Light and Appliance) in the Accessory menu can be configured for House Codes A thru P. The factory default is C and D respectively.

Objective

In this section you will learn how to:

- Change the House Code for the “Light” menu.
- Change the House Code for the “Appliance” menu.

Configuring the Light Menu

To configure the Light menu house code, select [say] the following:

[Egbert]-Utility-Keyboard-Three-Six

You are now prompted with:

"Three” (factory default, corresponds to House Code C)

Select [say] "X", where “x” is a number corresponding to a house code as shown in the following table.

Configuring the Appliance Menu

To configure the Appliance menu house code, select [say] the following:

[Egbert]-Utility-Keyboard-Three-Six

You are now prompted with:

"Four” (factory default, corresponds to House Code D)

Select [say] "X", where “x” is a number corresponding to a house code as shown in the following table.

Configuring the House Codes (cont.)

House Code Table

House Code	*Number*
A	1
B	2
C	3
D	4
E	5
F	6
G	7
H	8
I	9
J	10
K	11
L	12
M	13
N	14
O	15
P	16

Note

The above table is for configuring the additional X-10 menu house codes in the Accessory group only.

The main menus, Light and Appliance, are configured using the dipswitches as explained in Chapter 4, "*Configuring the House Code*", of the Installation Manual.

Chapter 11: Retraining

Overview

Introduction

The Simplicity contains a "Retrain" utility that allows for correction of mistrained words.

Let's say you're going through the words during the training session. The ECU just said, "Please say the word Down". You start to repeat "Down" but someone interrupts you and you say "what?" The ECU will now accept this as your pronunciation of the word "Down", and move on to the next word. Now you're stuck—the ECU has a bad word trained.

Or, what if the ECU is already trained, and every time you say a word to the ECU during command sequences, it keeps saying, "Excuse me?" Maybe during training you said the word with a particular pronunciation or a different tone of voice than you usually use. No problem!

As you will see, any word(s) can be retrained at any time.

Objective

In this chapter you will about:

- Retraining selected words

Retraining Words

Retraining

To start the retraining process, simply say "Egbert," wait for the ECU to respond "Yes?" and then say "Retrain". The ECU will go through the first six words, one at a time, and ask if you want that particular word retrained. If the word to be retrained is not one of the first six words, the ECU will ask you which group the word is in to be retrained.

The ECU expects a "Yes" or "No" as a response. If you say "No", the ECU will move on to the next word. If you respond with "Yes", the ECU will start the retrain sequence for that particular word.

When you are finished retraining a word, simply say Cancel. The new word will be updated and stored away for future use.

Example

"Egbert" is having trouble recognizing the word "Light". The following sequence will rectify this situation.

***Note**: The following procedure assumes the ECU has been named "Egbert".*

Tasks:	*Say:*	*ECU Response:*
Retrain	**Egbert**	***Yes***
	Retrain	***Do you want to retrain the word "Cancel"?***
	No	***Do you want to retrain the word "Help-me"?***
	No	***Do you want to retrain "The Name"***
	No	***Retrain "Yes"?***
	No	***Retrain "No"?***
	No	***Do you want to retrain the word "Retrain"?***
	No	***Do you want to retrain a number?***
	No	***Do you want to retrain a word from the menu group "Lights"?***
	Yes	***Retrain "Light"?***
	Yes	***Say "Light"***
	Light	***Say "Light"***
	Light	***Retrain "Allon"?***
	Cancel	

continued on next page

Retraining Words, *continued*

The ECU will ask you to say the word "Lights" two times. ***Take your time!*** The new word(s) will be saved. The ECU will continue on, asking if you wish to train the next word. Respond with "Cancel" if there are no more words to be retrained.

Chapter 12: Utility Functions

Overview

Introduction

There are several functions included to enhance the use of the Simplicity™ ECU. You can optionally do things like toggle the power failure announcement on and off, or reset the optional VMK feature.

Objectives

In this chapter, you learn how to use each Utility Function, including:

- Echo Mode
- Tone Mode
- Voice/Mouse Keyboard Reset
- System Status
- Breakout Mode
- Telephone Ringer Mode
- Power Fail Warning
- Menu Privacy Mode
- Light Shutoff
- Nurse Call Light

The Utility Functions

Utility Functions

To use any of the Utility functions, you first access the Utility Menu. Then you use Voice or Switch commands to access each Utility Function by number:

Function Number	*Mode*	*Function*
1	Echo Mode	Repeats all recognized words
2	Tone Mode	Produces a "soft" tone in the Computer Menu
3	Voice/Mouse Keyboard Reset	Resets the optional VMK feature (if installed)
4	System Status Mode	Reports system status; used by Quartet Technology Inc.
5	Breakout Mode	In voice Automatically exits the system after the ECU prompts ***Excuse Me*** five consecutive times
6	Telephone Ringer Mode	Turns on or shuts off the telephone ringer
7	Power Fail Warning	Turns on or shuts off the power fail announcement
8	Menu Privacy Mode	Turns on or shuts off the main speaker
9	Light Shutoff	Sends a P-16 shutoff command
10	Nurse Call Light	Sends a P-15 shutoff command

Echo Mode

Definition

When enabled, Echo Mode repeats all recognized words. Echo Mode is only available in voice mode.

Enable Echo Mode

Complete the following to enable the Echo Mode:

Task	*Say:*	*Select:*	*ECU Response*
Enable Echo Mode	**Egbert** **Utility** **Function** **One** **Turnon**	 **Utility** **Function** **One** **Turnon**	 ***Say Deleted***

***Note**: Selecting this utility for the first time prompts the ECU to respond **Say Enable**.*

Echo Mode is enabled and the ECU will repeat each recognized word.

Delete Echo Mode

You may want to delete the Echo Mode after you feel comfortable using the ECU, and do not want to have each command you speak repeated back to you. When Echo Mode is deleted, the ECU only repeats ***Yes***, ***Excuse Me***, and any numbers you speak while using the Phone, Light, or Appliance Menus.

Complete the following to delete the Echo Mode:

Task	*Say:*	*Select:*	*ECU Response*
Delete Echo Mode	**Egbert** **Utility** **Function** **One** **Shutoff**	 **Utility** **Function** **One** **Shutoff**	 ***Say Enabled***

Echo Mode is turned off. You can enable Echo Mode at any time.

Tone Mode

Definition

If you have the optional Voice/Mouse Keyboard (VMK™) product installed, this mode produces a "soft" tone in the Computer Menu. All recognized words in the Computer Menu generate a "soft" tone to verify that a word was recognized.

Note

If the Echo Mode is enabled, the Tone Mode is suppressed. To enable the Tone Mode, you must first delete the Echo Mode. See the prior page for detail on this process.

Enable Tone Mode

Complete the following to enable the Tone Mode:

Task	*Say:*	*Select:*	*ECU Response*
Enable Tone Mode	**Egbert** **Utility** **Function** **Two** **Turnon**	 **Utility** **Function** **Two** **Turnon**	 ***Deleted***

***Note**: Selecting this mode for the first time prompts the ECU to respond **Enabled**.*

The Tone Mode is enabled and the ECU generates a "soft" tone for each recognized Command Word in the Computer Menu.

Delete Tone Mode

Complete the following to delete the Tone Mode:

Task	*Say:*	*Select:*	*ECU Response*
Delete Tone Mode	**Egbert** **Utility** **Function** **Two** **Shutoff**	 **Utility** **Function** **Two** **Shutoff**	 ***Enabled***

The Tone Mode utility is turned off. You can enable the Tone Mode utility at any time.

continued on next page

Tone Mode, *continued*

The Tone Mode is turned off. You can enable the Tone Mode at any time.

Note

To run the ECU silently while in the VMK menus:

- Delete Echo Mode
- Delete Tone Mode

Voice/Mouse Keyboard Reset

Definition

The optional VMK feature (QTI P/N: 9230) provides a complete voice interface allowing full control of both keyboard and mouse functions of any IBM-compatible personal computer. If you have this feature installed, you can reset it with the VMK reset utility.

Note

A VMK reset may be necessary if your desktop keyboard and VMK are not working together properly. Resetting the VMK feature ***does not*** reset the ECU.

Reset VMK

Complete the following to reset the VMK:

Task	*Say:*	*Select:*	*ECU Response*
Reset VMK	**Egbert Utility Function Three**	**Utility Function Three**	***Mouse, Keyboard, Up***

If the reset was not successful, the ECU responds with a status message. Refer to Appendix A, ECU Messages, for detailed explanation of each status message the ECU may issue.

System Status

Definition

The System Status mode is used by Quartet Technology or your authorized distributor to evaluate the ECU's status.

Check System Status

Complete the following to check the system status:

Task	Say:	Select:	ECU Response
Check System status	**Egbert** **Utility** **Function** **Four**	**Utility** **Function** **Four**	***(ECU responds with a list of status codes)***

Breakout Mode

Definition

When enabled, the Breakout Mode automatically exits the system after the ECU prompts, "***Excuse Me?"*** five consecutive times.

By default, the Breakout Mode is enabled.

Delete Breakout Mode

You may want to delete this mode after you are very comfortable using the ECU. Complete the following to delete the Breakout Mode:

Task	*Say:*	*Select:*	*ECU Response*
Delete Breakout Mode	**Egbert** **Utility** **Function** **Five** **Shutoff**	 **Utility** **Function** **Five** **Shutoff**	 ***Excuse Me Enabled***

The Breakout Mode is turned off. You can enable this mode at any time.

Enable Breakout Mode

Complete the following to enable the Breakout Mode:

Task	*Say:*	*Select:*	*ECU Response*
Enable Breakout Mode	**Egbert** **Utility** **Function** **Five** **Turnon**	 **Utility** **Function** **Five** **Turnon**	 ***Excuse Me Deleted***

The Breakout Mode is enabled.

Telephone Ringer Mode

Definition

When enabled, the Telephone Ringer Mode turns on the telephone ringer. By default, Telephone Ringer Mode is deleted.

Enable Telephone Ringer Mode

Complete the following to enable the Telephone Ringer Mode:

Task	*Say:*	*Select:*	*ECU Response*
Enable Telephone Ringer Mode	**Egbert** **Utility** **Function** **Six** **Turnon**	 **Utility** **Function** **Six** **Turnon**	 ***(Ring) Deleted***

The Telephone Ringer Mode is enabled and the telephone ringer is turned on.

Delete Telephone Ringer Mode

You may want to delete this mode if you do not wish to hear the phone ring. Complete the following to delete the Telephone Ringer Mode:

Task	*Say:*	*Select:*	*ECU Response*
Enable Telephone Ringer Mode	**Egbert** **Utility** **Function** **Six** **Shutoff**	 **Utility** **Function** **Six** **Shutoff**	 ***(Ring) Enabled***

The Telephone Ringer Mode is deleted and the telephone ringer is turned off. You can enable the Telephone Ringer Mode at any time.

Power Fail Warning

Definition

When enabled, the Power Fail Warning mode turns on or shuts off the power fail announcement. By default, the Power Fail Warning is enabled.

Note

You may want to delete this mode if the AC power goes off for an extended period of time and you do not wish to hear the power fail warning repeated every minute.

Delete Power Fail Warning

Complete the following to delete the Power Fail Warning:

Task	*Say:*	*Select:*	*ECU Response*
Delete Power Fail Warning Mode	**Egbert** **Utility** **Function** **Seven** **Shutoff**	 **Utility** **Function** **Seven** **Shutoff**	 ***Power Failure Enabled***

The Power Fail Warning is turned off, and you will not hear an announcement if the power fails.

***Note**: Once the power comes back on, the ECU automatically enables the Power Fail Warning for you.*

Enable Power Fail Warning

Complete the following to enable the Power Fail Warning mode:

Task	*Say:*	*Select:*	*ECU Response*
Delete Power Fail Warning Mode	**Egbert** **Utility** **Function** **Seven** **Turnon**	 **Utility** **Function** **Seven** **Turnon**	 ***Power Failure Deleted***

The Power Fail Warning is turned on, and you will hear an announcement if the power fails.

continued on next page

Menu Privacy Mode

Definition

When enabled, Menu Privacy Mode shuts off the main speaker.

Enable Menu Privacy Mode

Complete the following to enable the Menu Privacy Mode:

Task	*Say:*	*Select:*	*ECU Response*
Enable Menu Privacy Mode	**Egbert** **Utility** **Function** **Eight** **Turnon**	 **Utility** **Function** **Eight** **Turnon**	 ***Menu Privacy Deleted***

***Note**: Selecting this utility for the first time prompts the ECU to respond **Menu Privacy Deleted**.*

Menu Privacy Mode is enabled and the main speaker is shutoff. All audio output, except telephone, is only available from the pillow speaker jack. Refer to Chapter 4, *"Privacy Command"* for information on enabling phone privacy.

Delete Menu Privacy Mode

Complete the following to delete the Menu Privacy Mode:

Task	*Say:*	*Select:*	*ECU Response*
Delete Menu Privacy Mode	**Egbert** **Utility** **Function** **Eight** **Shutoff**	 **Utility** **Function** **Eight** **Shutoff**	 ***Menu Privacy Enabled***

Menu Privacy Mode is deleted. You can enable Menu Privacy Mode at any time.

Note

Menu privacy will be deleted automatically under the following conditions: (1) a *"power failure"* announcement occurs, (2) the ECU says *"excuse me"* five consecutive times, (3) the ECU scans twice through the menus without a switch activation.

Light Shutoff

Definition

Allows you to manually transmit a "Shut off" (house code P-16) command to the module used for the X-10 off-hook indicator.

Shut Off X-10 Off-Hook Indicator

Complete the following to issue a "shut-off" command:

Task	*Say:*	*ECU Response*
Shut off X-10 off-hook indicator module	**Egbert** **Utility** **Function** **Nine**	***"Light Shut Off"***
(Choices are "yes", "no")	**Yes**	

Nurse Call Light

Definition

Allows you to manually transmit a "Shut off" (house code P-15) command to the module used for nurse call indicator.

Shut Off Nurse Call Indicator

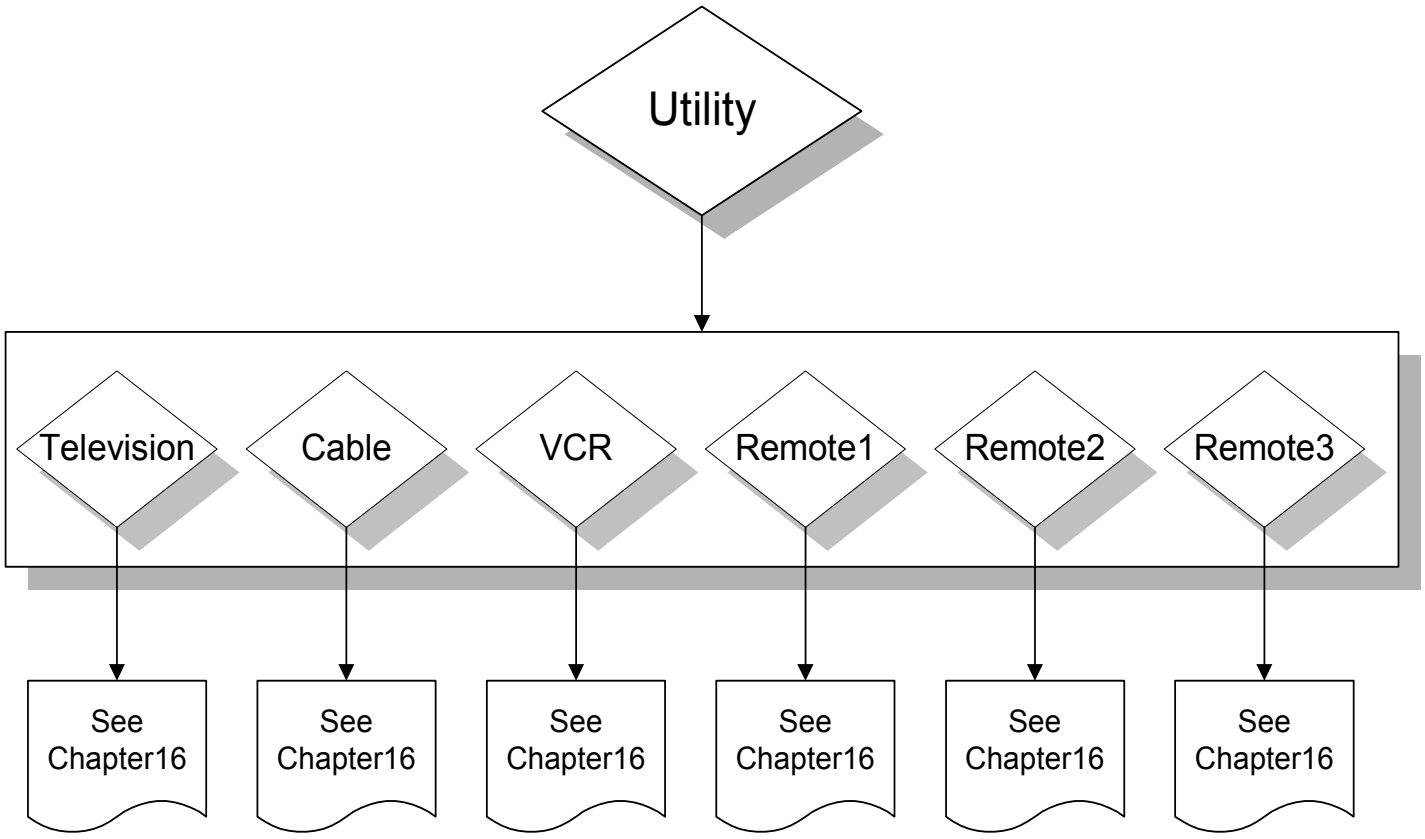
Complete the following to issue a "shut-off" command:

Task	*Say:*	*ECU Response*
Shut off nurse call indicator module	**Egbert** **Utility** **Function** **Ten**	***"Nurse Call Shut-off"***
(Choices are "yes", "no")	**Yes**	

Utility Flowchart

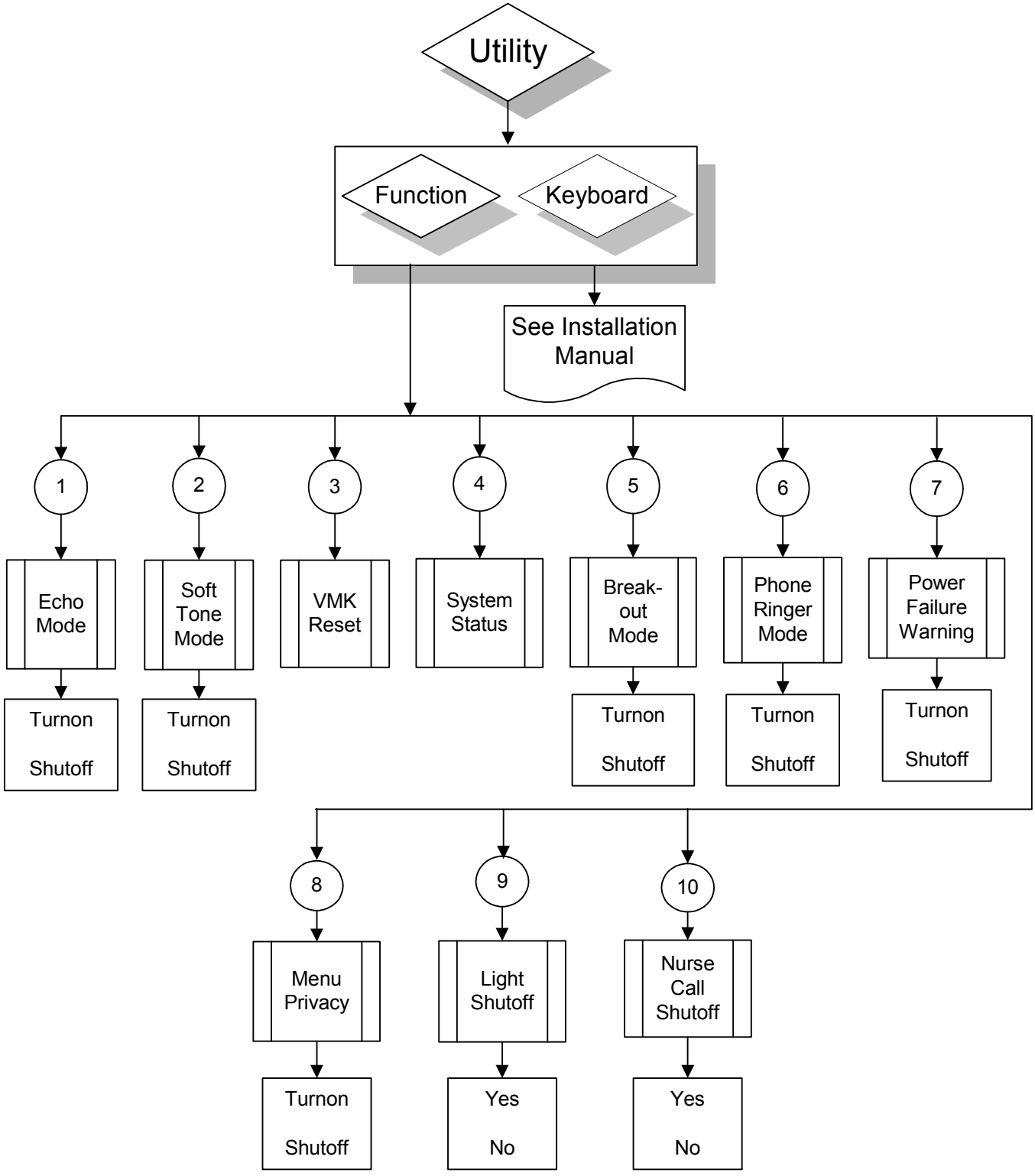
Introduction

This flowchart outlines the Utility functions:



continued on next page

Utility Flowchart, *continued*



Chapter 13: The Computer Menu

Overview

Introduction

The Simplicity allows you to use the ECU microphone to access computer-based voice recognition software, such as Dragon Dictate. Note that while you are using one of these software packages, your ECU is still ready and able to complete other commands, such as answer your phone or turn on a light.

As part of the setup process, you must connect your ECU's *Audio Output Connector* to your personal computers *Line-In* input.

The examples in this chapter assume that your PC is already turned on. See the Light and Appliance chapter in this manual for details on this process.

Objectives

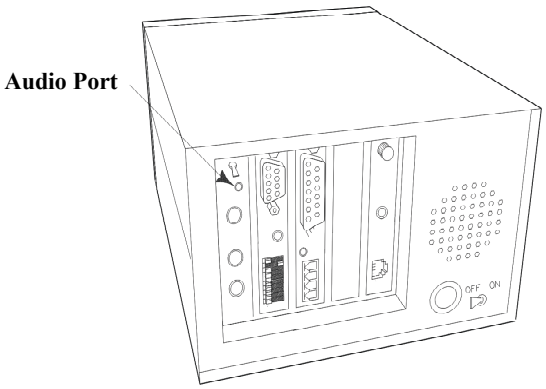
In this chapter, you learn how to:

- Connect the audio cable from the ECU to the PC
- Use the ECU microphone to access your PC's voice-recognition software

Connecting the Audio Cable

Connect one end of the audio cable (QTI P/N: 4228) to the audio port shown below. The audio cable is an 1/8" to 1/8" male to male cable. If your using a cable other then the one provided by Quartet, be sure to use a high quality audio shielded type.

Connect the other end to your PC's "***Line In***" jack. Refer to your computer documentation for help in identifying the computer's "***Line In***" jack.



Note

The audio port on the ECU produces a "Line Level" output.

The Computer Menu Commands

What the Computer Menu Can Do:

- Access your PC's voice-recognition software
- Disconnect the ECU microphone from the PC's voice-recognition software

Computer Menu Commands

Once your personal computer is connected to the ECU and turned on, you use Voice commands to access the PC's voice-recognition software with the Computer Menu commands:

Computer Menu Commands	*Function*
Turnon	Allows you to use the ECU microphone to access the PC's voice-recognition software
Shutoff	Disconnects the ECU microphone from the computer's voice-recognition software

Note

Once the "Turnon" command has been issued, the ECU's microphone is effectively connected to the computer.

Some computers and software require you to run an "audio wizard" to turn on the computers line level input jack before the software will operate correctly.

If you are experiencing difficulties at this point with your PC voice recognition software not hearing any audio input, please refer to the documentation that came with your software on setting up the line level input or call the manufacturer directly.

Note

If you have the optional voice/mouse keyboard (VMK) card installed, refer to the VMK documentation.

Turnon, and Shutoff Commands

Turnon

The Turnon command allows you to use the ECU microphone to the access the PC's voice-recognition software.

Task	*Voice Commands* **Say:**	*Switch Commands* **Select:**
Use the ECU microphone to access computers voice recognition software:	**Egbert** **Computer** **Turnon**	**Computer** **Turnon**

Remember that as you work with the PC software, you can still issue other Voice or Switch commands to the ECU.

Shutoff

The Shutoff command disconnects the ECU microphone from the computer's voice-recognition software.

Task	*Voice Commands* **Say:**	*Switch Commands* **Select**:
Disconnect the ECU microphone from computers voice recognition software:	**Egbert** **Computer** **Shutoff**	**Computer** **Shutoff**

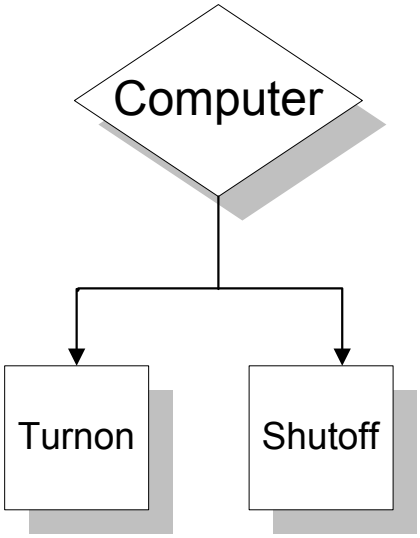
Note

For switch users, the "Computer" menu must be enabled before access to the audio output is available. Refer to the "*Owners Manual*", Chapter 3, "*Switch Commands, Customizing Menu Selection*" for details on how to enable the Computer menu.

Computer Menu Flowchart

Introduction

This flowchart outlines the Computer Menu commands:



(This page left blank intentionally)

Chapter 14: Learning Infrared

Overview

Introduction

The brand codes listed in Appendix A allow you to enter a three-digit number for any television, VCR, or cable box listed.

However, if the device you wish to control is something other then a television, VCR, or cable box, then its remote control can be "*learned*" by the Simplicity.

Objectives

In this chapter, you learn how to:

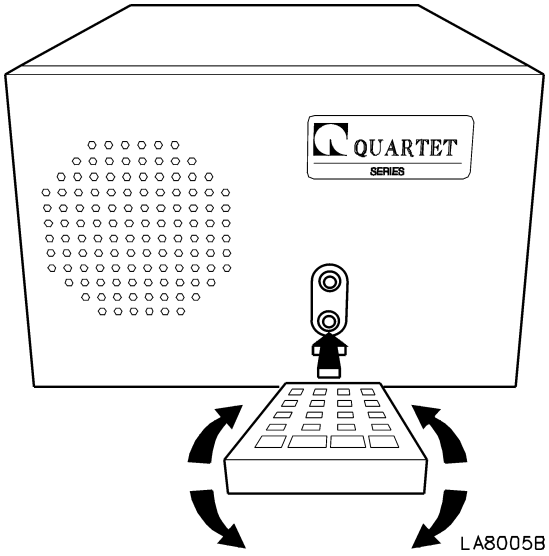
- Position the remote control to be learned correctly
- Learn a remote control into the Simplicity
- Re-learn individual keys
- Adjust the "key hold" time

Learning Infrared

Positioning

In order for the Simplicity to learn a remote control device, you must hold the remote control directly in front of the "Infrared Receiver" (*see Chapter 1, page 6*).

It is very important to "optically" align the remote control with the ECU. The remote control should be no more than a half-inch away from the front of the ECU.



Note: Some remote controls have a small LED (light emitting diode) at the top of the remote control. Others have the LED at the top center. Regardless of location, you must align this LED up with the ECU's "*Infrared Receiver*".

Note: If your remote has two or more LED's, block all but one before training the ECU.

Note: Always use fresh batteries in the remote to be learned before training the ECU.

Learning a Remote Control

Introduction

The following example assumes you wish to learn a remote control for a room heater into the Simplicity.

The remote control has eight functions:

- Turn On
- Shut Off
- Stop
- Up
- Down
- Cold
- Warm
- Hot

For this example, the remote control will be learned under the menu group "Remote 1".

Example

Task	*Voice Commands* **Say:**	*Switch Commands* **Select:**
Learn the room heater remote control under menu group "Remote 1"	**Egbert** **Utility** **Remote1**	**Utility** **Remote1**

Procedure

1. The ECU responds with:

   "*Is the device a ….Television, Cable, etc.*"

2. Say (or select) "No" until you come to:

   "*Is the device a Generic?*"

3. Say (or select) "Yes". The ECU responds with:

   "*Please wait…*"

continued on next page

4. Shortly, you will be prompted with:

   "*Push the key for Turnon*"

   Respond by pressing the "*Turn on*" key of the remote control. Continue to ***hold*** this key until told to release it.

Note*: If the ECU cannot "see" your remote control, it will prompt you again to push the key. If after three times it still cannot "see" your remote control signal, the ECU will terminate the learning session. Check to make sure that the remote control is operational by testing it on the appliance.*

5. You will then be prompted with:

   "*Push the key for Shutoff*"

   Respond by pressing the "*shut off*" key of the remote control. Continue to ***hold*** this key until told to release it.

6. You will then be prompted with:

   "*Push the key for Stop*"

   Respond by pressing the "*stop*" key of the remote control. Continue to ***hold*** this key until told to release it.

7. You will then be prompted with:

   "*Push the key for Up*"

   Respond by pressing the "*up*" key of the remote control. Continue to ***hold*** this key until told to release it.

8. You will then be prompted with:

   "*Push the key for Down*"

   Respond by pressing the "*down*" key of the remote control. Continue to ***hold*** this key until told to release it.

continued on next page

9. You will then be prompted with:

   "*Push the key for Function 0*"

   Respond by pressing a key that you wish to associate with Function 0. In our example, we'll push the "*cold*" key. Continue to ***hold*** this key until told to release it.

10. You will then be prompted with:

    "*Push the key for Function 1*"

    Respond by pressing a key that you wish to associate with Function 1. In our example, we'll push the "*warm*" key. Continue to ***hold*** this key until told to release it.

11. You will then be prompted with:

    "*Push the key for Function 2*"

    Respond by pressing a key that you wish to associate with Function 2. In our example, we'll push the "*hot*" key. Continue to ***hold*** this key until told to release it.

12. You will then be prompted with:

    "*Please wait…*"

    Shortly (approximately 30 seconds), you will hear three clicks to indicate that Remote 1 has been successfully learned.

Refer to Chapter 18 of the "*Simplicity Owner's Manual"*, for operating a generic device learned into the Remote 1 menu group.

Re-learning Individual Keys

Introduction

After a device has been learned, individual keys for that device may be re-learned.

Example

For example, to re-learn a key from the previous example the sequence would be:

Task	*Voice Commands* Say:	*Switch Commands* Select:
Re-learn a key from the previous example	**Egbert** **Utility** **Remote1**	 **Utility** **Remote1**

The unit will respond with:

"*Retrain?*"

Respond with "Yes". The unit will respond with:

"*Please wait...*"

You will then be prompted to re-learn a key at a time. Respond with "Yes" when you come to the particular key(s) you wish to re-learn. A response of "No" will cause the unit to move on to the next key. When you are finished, say (select) "cancel" to exit.

Adjusting Hold Times

Introduction

Some remote controls require that their keys be "held" longer to operate a particular device than other remote controls.

The Simplicity has the capability to configure hold times for each of the infrared groups, i.e., Television, Cable, VCR, Remote1, Remote2, and Remote3.

Refer to Chapter 15, "*Configuration Utility*", to learn how to change a particular hold time.

Hold Times

The hold times are divided into two types:

- Power on/off keys
- All other keys

"Power On/Off" Keys

"Power on/off" keys are those keys that turn on or off power to a device. Most devices require that these keys be "*held*" longer than all the others to ensure proper operation.

The "hold" tome for these keys can be adjusted from zero to nine (.15 seconds to 2.85 seconds).

The factory default setting is 2 (.75 seconds).

"All Other" Keys

"All other" keys are those keys that perform other functions (channel up, volume, mute, etc.).

The "hold" tome for these keys can be adjusted from zero to nine (.15 seconds to 1.5 seconds).

The factory default setting is 1 (.3 seconds).

Key Hold Times

Introduction

The following table outlines the hold times for both the “power on/off” and “all other” keys.

Hold Time Table

Number	Power On/Off (seconds)	All Other Keys (seconds)
0	**0.15**	**0.15**
1	**0.45**	**0.30**
2	**0.75**	**0.45**
3	**1.05**	**0.60**
4	**1.35**	**0.75**
5	**1.65**	**0.90**
6	**1.95**	**1.05**
7	**2.25**	**1.20**
8	**2.55**	**1.35**
9	**2.85**	**1.50**

***Note**: Generally, hold times need to be adjusted if the device seems intermittent. If adjustment has to be made, it is recommended that the hold time be incremented one step at a time until the device behaves properly.*

(This page left blank intentionally)

Chapter 15: Configuration Utility

Overview

Introduction

One of the most powerful features of the Simplicity™ is the ability to configure the ECU to a particular users need.

There are many parameters that can be modified, if needed, to enhance the operational characteristics of the Simplicity™.

Objectives

In this Chapter you will learn to:

- Modify a configuration parameter

Configuration Tables

Introduction

The following tables define parameters that can be used to customize the ECU to your needs. Items shown in ***boldface italic*** are the factory default setting.

To access a particular table entry, [Say] or select:

[**The Name**], **Utility**, **Keyboard**, **X**, **X** (Where x, x is the appropriate table entry.)

Test and Utility Parameters (Entries 00-08)

Entry	ECU Response	Choice	Description
0,0	Not Programmed		Reserved for future use
0,1	Function 0 1 Please wait… 00Function Skipped		ECU checks its hardware integrity
0,2	Function 0 2, (3 clicks), error 01		ECU checks its software integrity.
0,3	Plays out entire ECU word list		For Quartet Technology, Inc. usage.
0,4	Plays out ECU model and revision of Software		For Quartet Technology, Inc. usage.
0,5	Function 0 5, yes, no	Yes, No	No exits without any changes. Yes erases all phone numbers stored in memory.
0,6	Function 0 6, yes, no	Yes, No	No exits without any changes. Yes erases all devices stored in infrared memory.
0,7	Not Programmed		Reserved for future use
0,8	Not Programmed		Reserved for future use

Light and Appliance Parameters (Entries 09-15)

Entry	ECU Response	Choice	Description
0,9	Current house code	***1***-16	House Code setting (A-P), where 1=A, 2=B, etc. (See Chapter 4)
1,0	***Light 6,0 enabled*** or Light 5,0 enabled	Turnon Shutoff	Turnon exits without any changes. Shutoff toggles from 60Hz to 50Hz, or 50Hz to 60Hz line frequency.
1,1	Enabled or ***deleted***	Turnon Shutoff	Turnon enables and shutoff deletes looping of the function command in the Light menu
1,2	Enabled or ***deleted***	Turnon Shutoff	Turnon enables and shutoff deletes looping of the function command in the Appliance menu.
1,3	After choosing a module from 1 to 16, the ECU responds with the current time setting for that module	1-16	Specifies (in seconds) the length of time a module will activate for when using the "function" command in the Light menu.
1,4	After choosing a module from 1 to 16, the ECU responds with the current time setting for that module	1-16	Specifies (in seconds) the length of time a module will activate for when using the "function" command in the Appliance menu.
1,5	Not Programmed		Reserved for future use

Configuration Table, *continued*

Accessory Parameters
(Entries 16-19)

Entry	ECU Response	Choice	Description
1,6	Enabled or ***deleted***	Turnon Shuttoff	Turnon enables and shutoff deletes looping of the Accessory 1 command
1,7	***Enabled*** or deleted	Turnon Shuttoff	Turnon enables and shutoff deletes looping of the Accessory 2 command
1,8	ECU responds with the current time setting	***1***-16	Specifies (in seconds) the length of time Accessory 1 contact will activate for.
1,9	ECU responds with the current time setting	***1***-16	Specifies (in seconds) the length of time Accessory 2 contact will activate for.

Telephone Parameters
(Entries 20-24)

Entry	ECU Response	Choice	Description
2,0	***0***,1,2, or not programmed	0-2	Selecting 1 or 2 sets a timed loop break (TLB) *(Consult factory for proper setting.)*
2,1	Enabled or ***deleted***	Turnon Shuttoff	Turnon enables and shutoff deletes pulse dialing
2,2	(*Ring*) enabled or **(*Ring*) deleted**	Turnon Shuttoff	Turnon enables and shutoff deletes the telephone ringer
2,3	Phone record	00-99	Enter a 2-digit number where the telephone number is to be stored, followed by the telephone number, followed by the word "record".
2,4	Phone Light ***deleted*** or Phone Light enabled	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) the X-10 off-hook indicator. Uses X-10 house code P-16.

Miscellaneous Settings
(Entries 25-29)

Entry	ECU Response	Choice	Description
2,5	Nurse Call Light ***deleted*** or Nurse Call Light enabled. (Available in optional "Nurse Call" software only.)	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) the nurse call X-10 indicator. Uses X-10 house code P-15.
2,6	Not programmed		Reserved for future use
2,7	Not programmed		Reserved for future use
2,8	1, ***2***, 3, 4	1,**2**,3,4	Change the number of times you can adjust the movement of the bed, up or down, using a switch.
2,9	Not programmed		Reserved for future use

Configuration Table, *continued*

Voice Options
(Entries 30-34)

Entry	ECU Response	Choice	Description
3,0	***Say enabled*** or say deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) "echo mode"
3,1	***(Tone) enabled***, (*tone*) deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) "tone mode". Active only when optional VMK controller is installed.
3,2	Excuse me enabled or excuse me deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) "breakout mode".
3,3	Current Setting	1,2,**3**,4	Sets the QVR energy level for long train
3,4	Current Setting	1,2,**3**,4	Sets the QVR energy level for short train

Accessory X-10 Menu Options
(Entries 35-39)

Entry	ECU Response	Choice	Description
3,5	***Deleted*** or enabled	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) the Light menu in the accessory group.
3,6	1 thru 16 (***default 3, house code C***)	1 thru 16	Specifies the house code for the Light group in the Accessory menu.
3,7	***Deleted*** or enabled	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) the Appliance menu in the accessory group.
3,8	1 thru 16 (***default 3, house code D***)	1 thru 16	Specifies the house code for the Appliance group in the Accessory menu.
3,9	Mouse, keyboard, up		Resets the optional VMK controller.

Television Menu Options
(Entries 40-49)

Entry	ECU Response	Choice	Description
4,0	Current setting	0-9	Specifies the "hold time" for the "power" key
4,1	Current setting	0-9	Specifies the "hold time" for all the "other keys" keys
4,2	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Turnon" command
4,3	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 0" command
4,4	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 1" command
4,5	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 2" command
4,6	Current setting	1,***2***,3,4	Specifies number of digits required before channel command is transmitted
4,7	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of menu commands. Device dependent
4,8	Not programmed		Reserved for future use
4,9	Is the device a ….		Allows for entry of a device in this group. *(See Chapter 16)*

Configuration Table, *continued*

Cable Menu Options
(Entries 50-59)

Entry	ECU Response	Choice	Description
5,0	Current setting	0-9	Specifies the "hold time" for the "power" key
5,1	Current setting	0-9	Specifies the "hold time" for all the "other keys" keys
5,2	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Turnon" command
5,3	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 0" command
5,4	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 1" command
5,5	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 2" command
5,6	Current setting	1,***2***,3,4	Specifies number of digits required before channel command is transmitted
5,7	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of menu commands. Device dependent
5,8	Not programmed		Reserved for future use
5,9	Is the device a ….		Allows for entry of a device in this group. *(See Chapter 16)*

VCR Menu Options
(Entries 60-69)

Entry	ECU Response	Choice	Description
6,0	Current setting	0-9	Specifies the "hold time" for the "power" key
6,1	Current setting	0-9	Specifies the "hold time" for all the "other keys" keys
6,2	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Turnon" command
6,3	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 0" command
6,4	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 1" command
6,5	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 2" command
6,6	Current setting	1,***2***,3,4	Specifies number of digits required before channel command is transmitted
6,7	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of menu commands. Device dependent
6,8	Not programmed		Reserved for future use
6,9	Is the device a ….		Allows for entry of a device in this group. *(See Chapter 16)*

Configuration Table, *continued*

Remote 1 Menu Options
(Entries 70-79)

Entry	ECU Response	Choice	Description
7,0	Current setting	0-9	Specifies the "hold time" for the "power" key
7,1	Current setting	0-9	Specifies the "hold time" for all the "other keys" keys
7,2	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Turnon" command
7,3	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 0" command
7,4	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 1" command
7,5	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 2" command
7,6	Current setting	1,***2***,3,4	Specifies number of digits required before channel command is transmitted
7,7	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of menu commands. Device dependent
7,8	Not programmed		Reserved for future use
7,9	Is the device a ….		Allows for entry of a device in this group. *(See Chapter 16)*

Remote 2 Menu Options
(Entries 80-89)

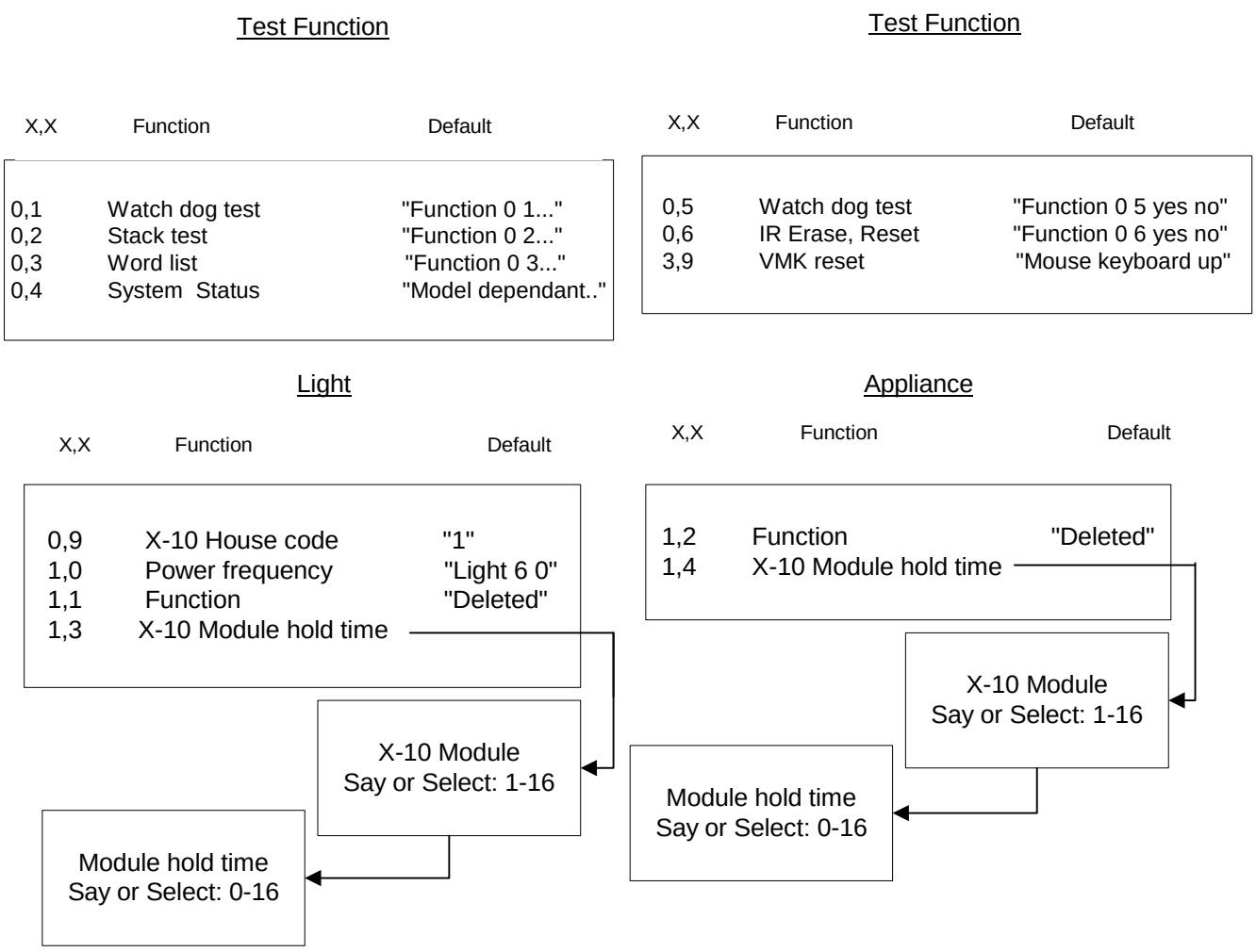
Entry	ECU Response	Choice	Description
8,0	Current setting	0-9	Specifies the "hold time" for the "power" key
8,1	Current setting	0-9	Specifies the "hold time" for all the "other keys" keys
8,2	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Turnon" command
8,3	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 0" command
8,4	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 1" command
8,5	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 2" command
8,6	Current setting	1,***2***,3,4	Specifies number of digits required before channel command is transmitted
8,7	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of menu commands. Device dependent
8,8	Not programmed		Reserved for future use
8,9	Is the device a ….		Allows for entry of a device in this group. *(See Chapter 16)*

Configuration Table, *continued*

Remote 3 Menu Options
(Entries 90-99)

Entry	ECU Response	Choice	Description
9,0	Current setting	0-9	Specifies the "hold time" for the "power" key
9,1	Current setting	0-9	Specifies the "hold time" for all the "other keys" keys
9,2	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Turnon" command
9,3	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 0" command
9,4	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 1" command
9,5	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of the "Function 2" command
9,6	Current setting	1,***2***,3,4	Specifies number of digits required before channel command is transmitted
9,7	***Enabled*** or deleted	Turnon Shuttoff	Enables (turnon) or deletes (shutoff) looping of menu commands. Device dependent
9,8	Not programmed		Reserved for future use
9,9	Is the device a ….		Allows for entry of a device in this group. *(See Chapters 16)*

Configuration Flowchart



continued on next page

Configuration Flowchart, *continued*

Accessory

X,X	Function	Default
1,6	Acc. 1 loop	"Deleted"
1,7	Acc. 2 loop	"Enabled"
1,8	Acc. 1 hold time	"1"
1,9	Acc. 2 hold time	"1"

Accessory hold time
Say or Select: 1-16

Phone

X,X	Function	Default
2,0	Timed loop break	"0"
2,1	Pulse/Tone	"Deleted"
2,2	Ringer	"Deleted"
2,3	Phone list	"Phone Record"
2,4	X10 Phone Off Hook Indicator	"Deleated"

Miscellaneous Settings

X,X	Function	Default
2,5	Nurse Call Light	" Deleated"
2,8	Bed Movement Looping	"2"

Voice Recognition

X,X	Function	Default
3,0	Smart Switch	"Say Enabled"
3,1	Tone	"Tone Enabled"
3,2	Excuse Me	"Excuse Me Deleted"

Accessory X10 Menus

X,X	Function	Default
3,5	Light	"Deleted"
3,6	House Code	"3"
3,7	Appliance	"Deleted"
3,8	House Code	"4"

continued on next page

Configuration Flowchart, *continued*

Television

X,X	Function	Default
4,0	Power hold	"2"
4,1	Key hold	"1"
4,2	TURNON	"Enabled"
4,3	Function 0	"Enabled"
4,4	Function 1	"Enabled"
4,5	Function 2	"Enabled"
4,6	Channel digits	"2"
4,7	Menu loop	"Enabled"

Cable

X,X	Function	Default
5,0	Power hold	"2"
5,1	Key hold	"1"
5,2	TURNON	"Enabled"
5,3	Function 0	"Enabled"
5,4	Function 1	"Enabled"
5,5	Function 2	"Enabled"
5,6	Channel digits	"2"
5,7	Menu loop	"Enabled"

VCR

X,X	Function	Default
6,0	Power hold	"2"
6,1	Key hold	"1"
6,2	TURNON	"Enabled"
6,3	Function 0	"Enabled"
6,4	Function 1	"Enabled"
6,5	Function 2	"Enabled"
6,6	Channel digits	"2"
6,7	Menu loop	"Enabled"

Remote1

X,X	Function	Default
7,0	Power hold	"2"
7,1	Key hold	"1"
7,2	TURNON	"Enabled"
7,3	Function 0	"Enabled"
7,4	Function 1	"Enabled"
7,5	Function 2	"Enabled"
7,6	Channel digits	"2"
7,7	Menu loop	"Enabled"

continued on next page

Configuration Flowchart, *continued*

Remote2

X,X	Function	Default
8,0	Power hold	"2"
8,1	Key hold	"1"
8,2	TURNON	"Enabled"
8,3	Function 0	"Enabled"
8,4	Function 1	"Enabled"
8,5	Function 2	"Enabled"
8,6	Channel digits	"2"
8,7	Menu loop	"Enabled"

Remote3

X,X	Function	Default
9,0	Power hold	"2"
9,1	Key hold	"1"
9,2	TURNON	"Enabled"
9,3	Function 0	"Enabled"
9,4	Function 1	"Enabled"
9,5	Function 2	"Enabled"
9,6	Channel digits	"2"
9,7	Menu loop	"Enabled"

Chapter 16: Programming Flowcharts

Overview

Introduction

The following pages contain flowcharts to help you when training or learning infrared codes.

Objectives

In this chapter you will learn about:

- Entering 3-digit brand codes for televisions
- Entering 3-digit brand codes for cable boxes
- Entering 3-digit brand codes for VCR's
- Changing 3-digit brand codes for televisions
- Changing 3-digit brand codes for cable boxes
- Changing 3-digit brand codes for VCR's
- Learning infrared keys
- Relearning infrared keys

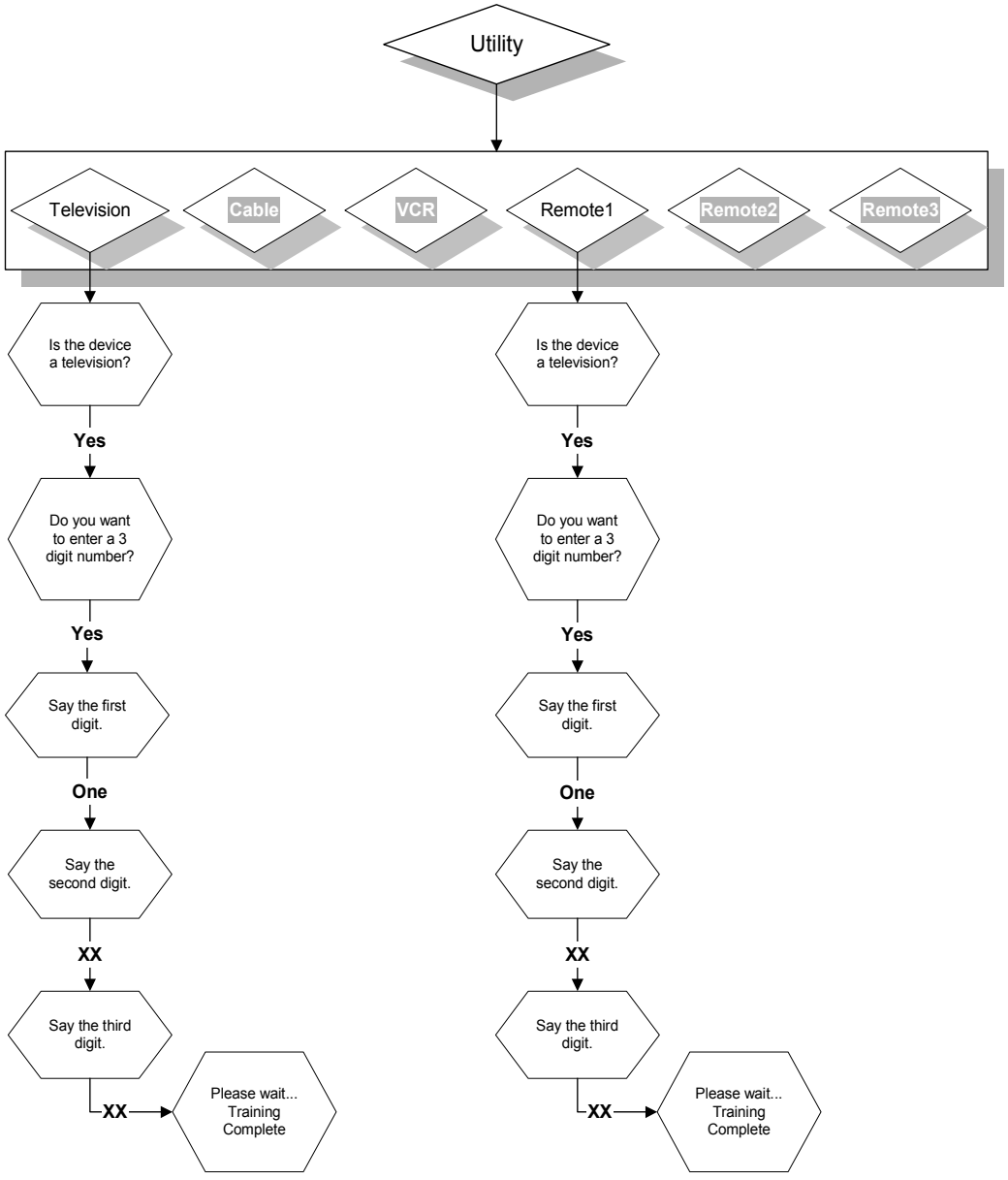
Entering 3-digit brand codes for televisions

Preface

The following flowchart demonstrates entering a 3-digit brand code for a television.

Note

Only menu groups Television and Remote1 can accept 3-digit *television* brand codes.



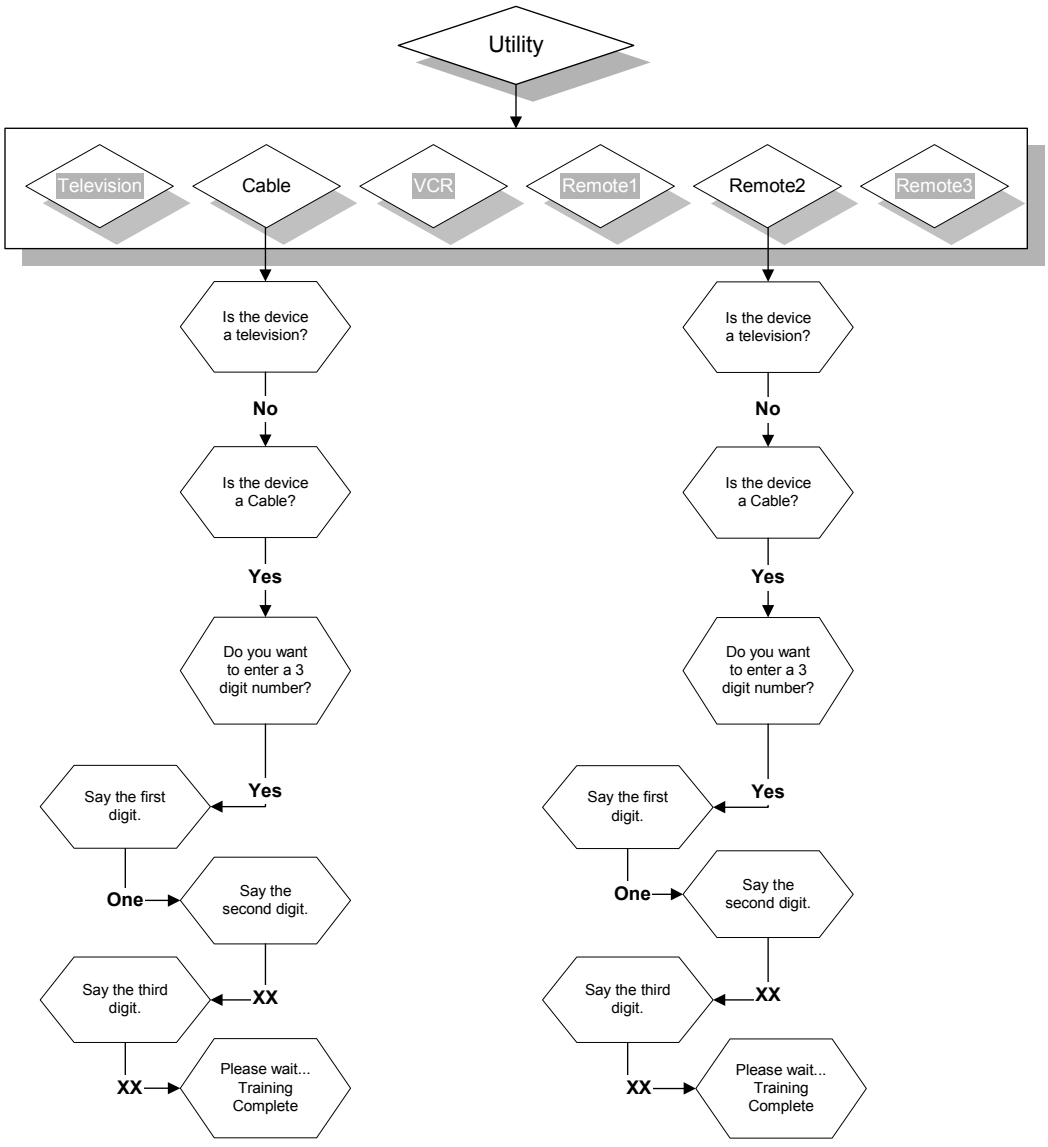
Entering 3-digit brand codes for cable boxes

Preface

The following flowchart demonstrates entering a 3-digit brand code for a cable box.

Note

Only menu groups Cable and Remote2 can accept 3-digit *cable box* brand codes.



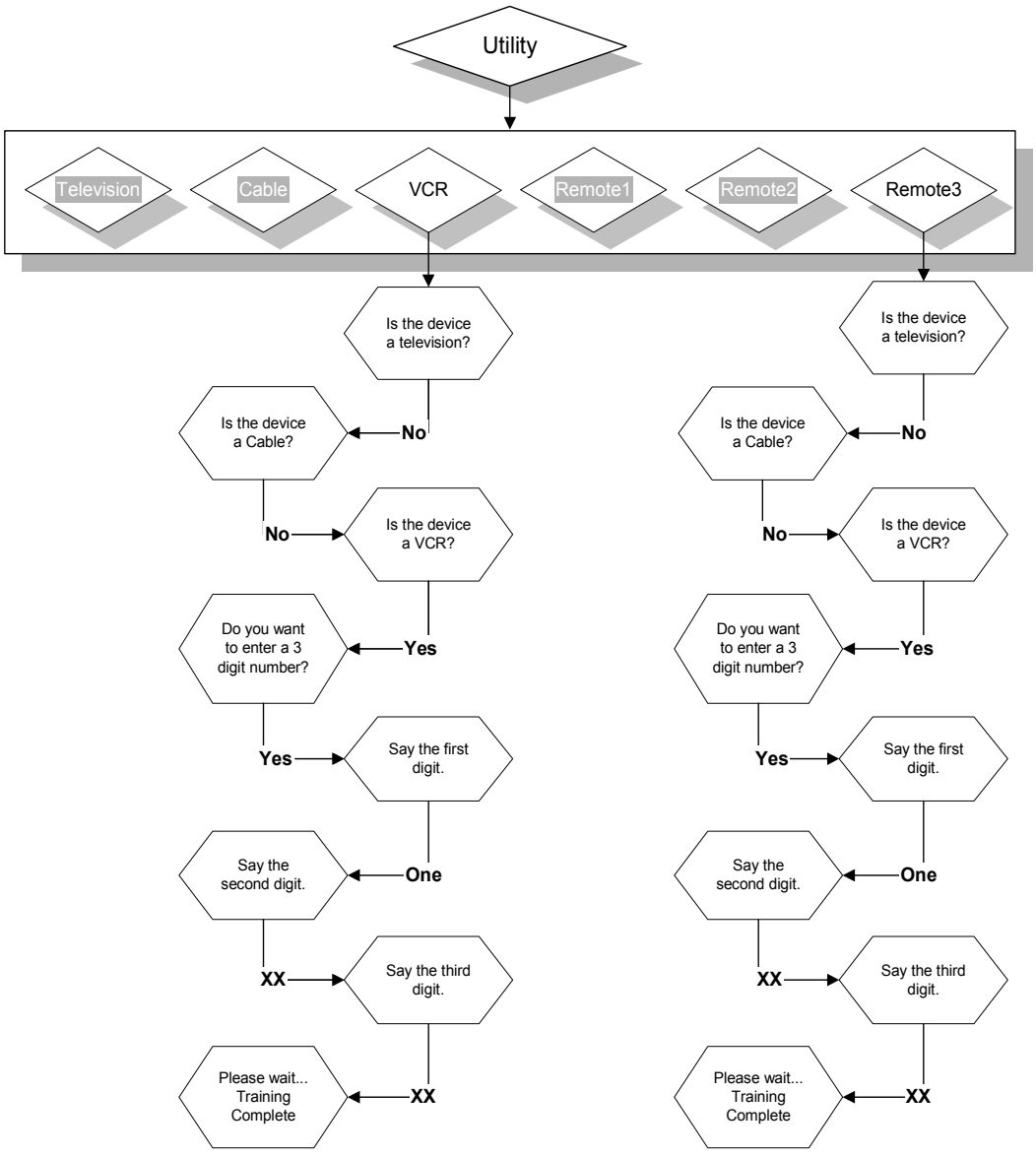
Entering 3-digit brand codes for VCR's

Preface

The following flowchart demonstrates entering a 3-digit brand code for a VCR.

Note

Only menu groups VCR and Remote3 can accept 3-digit *VCR* brand codes.



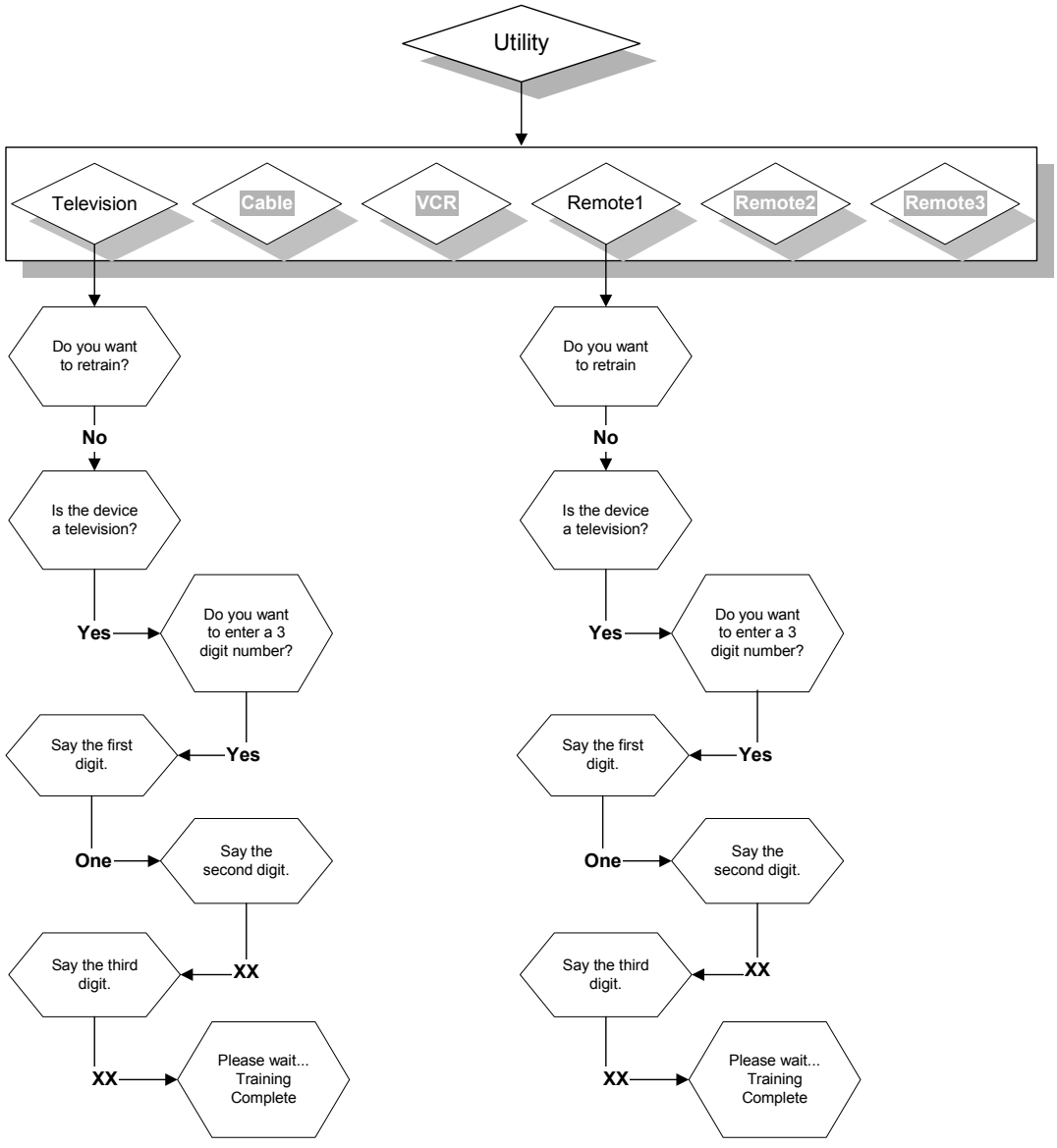
Changing a 3-digit brand codes for televisions

Preface

The following flowchart demonstrates changing a 3-digit brand code for a television.

Note

Only menu groups Television and Remote1 can accept 3-digit *television* brand codes.



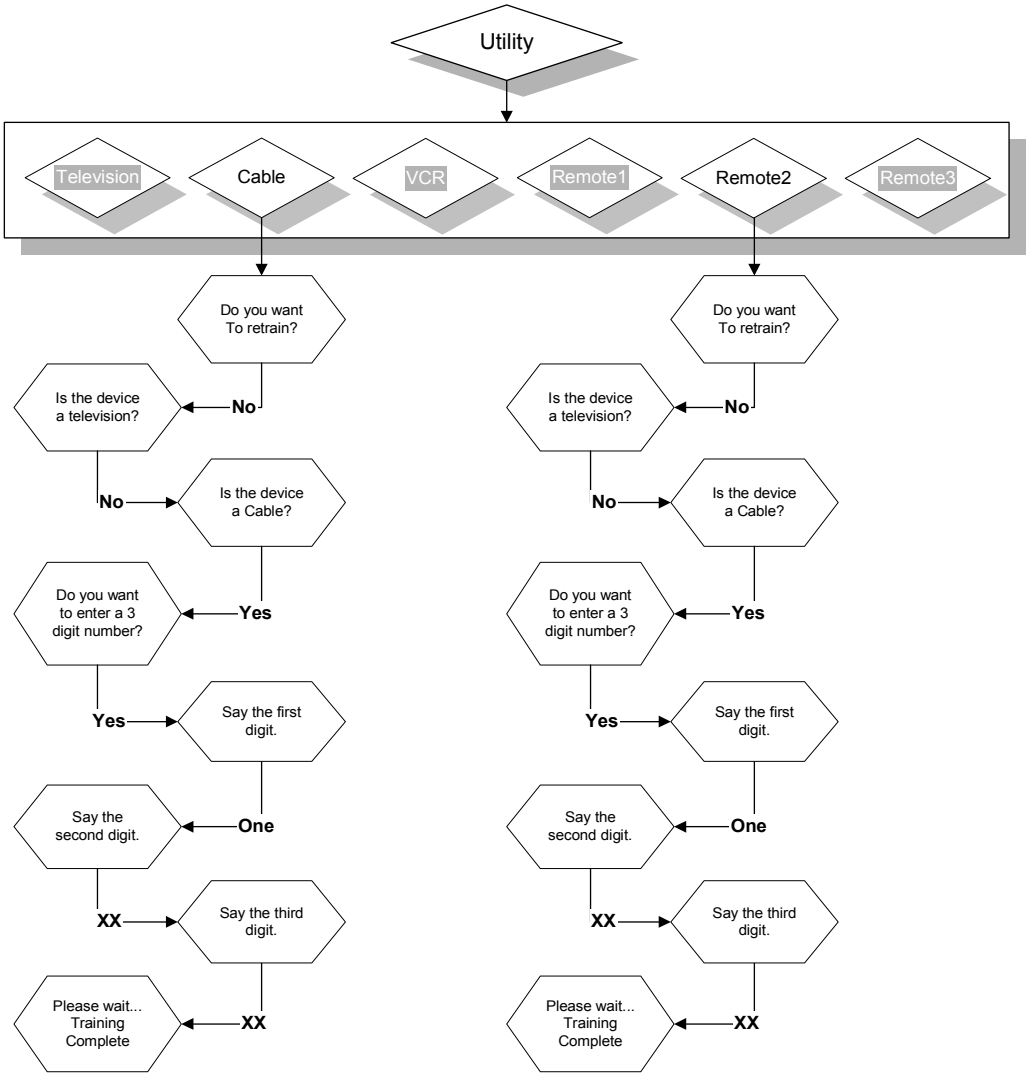
Changing a 3-digit brand codes for cable boxes

Preface

The following flowchart demonstrates changing a 3-digit brand code for a cable box.

Note

Only menu groups Cable and Remote2 can accept 3-digit *cable box* brand codes.



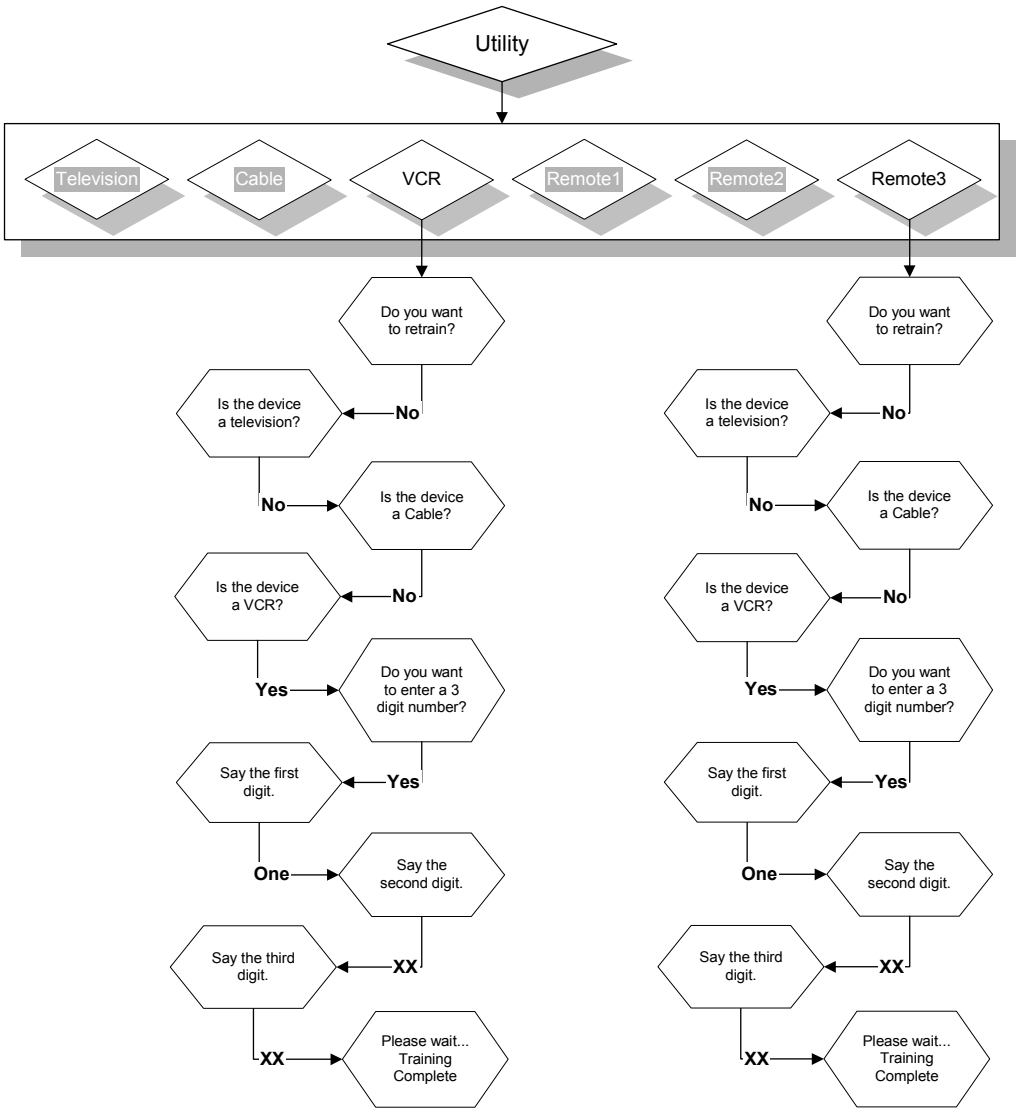
Changing a 3-digit brand codes for a VCR

Preface

The following flowchart demonstrates changing a 3-digit brand code for a VCR.

Note

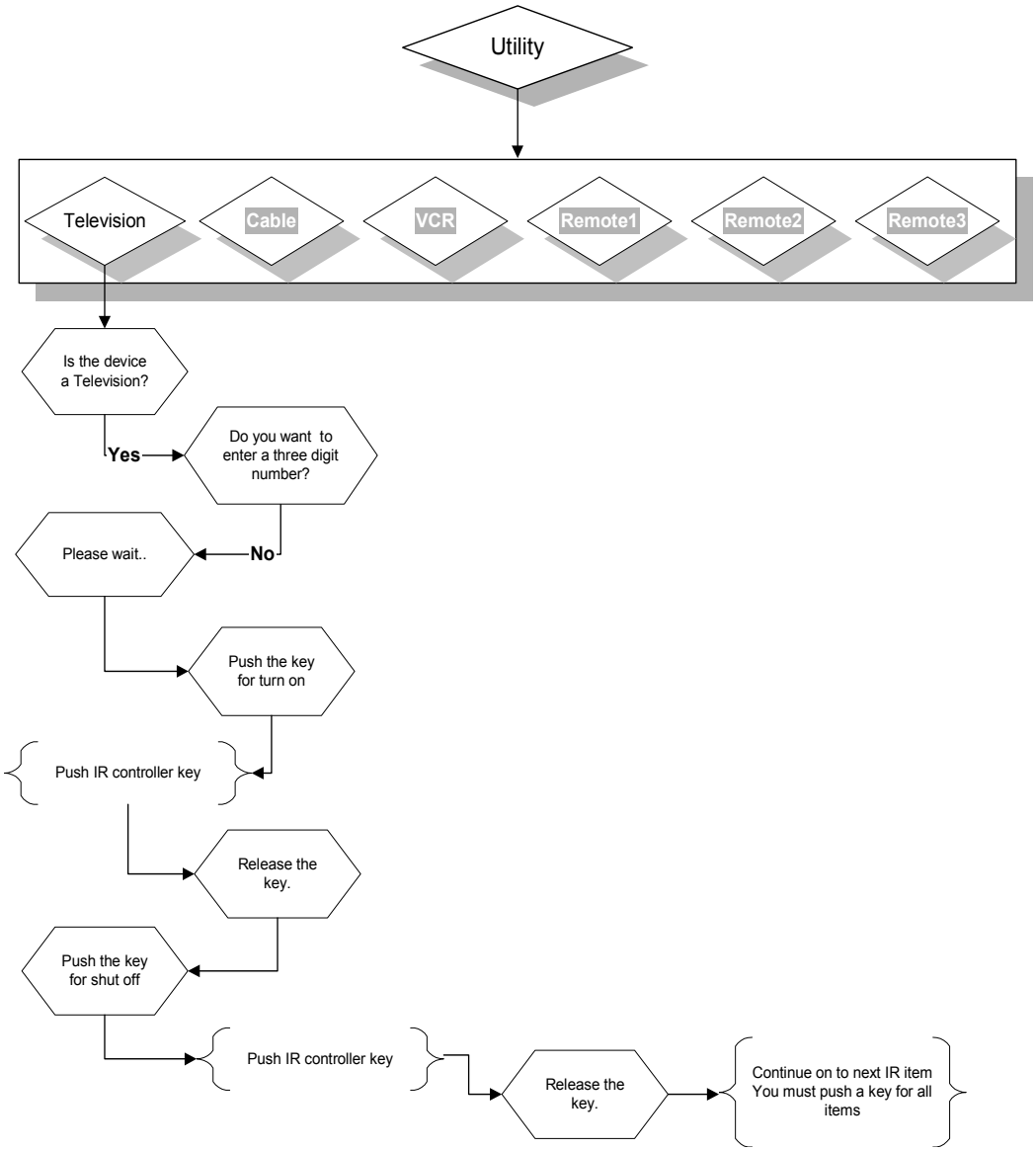
Only menu groups VCR and Remote3 can accept 3-digit *VCR* brand codes.



Learning infrared keys

Preface

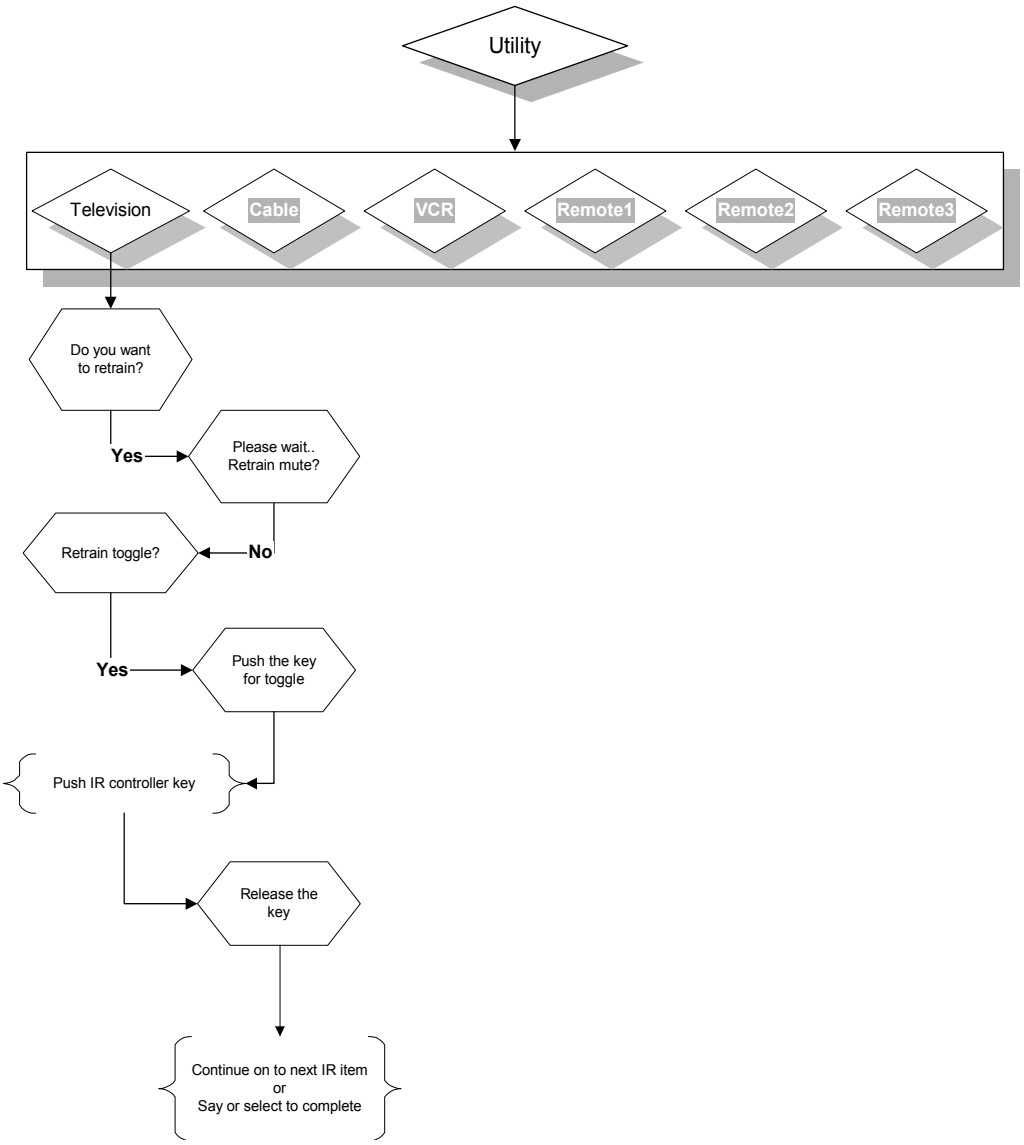
The following flowchart demonstrates learning infrared keys for a television.



Relearning infrared keys

Preface

The following flowchart demonstrates relearning infrared keys for a television.



Appendix A: ECU Messages

Overview

Introduction

The All-In-One contains extensive built-in self diagnostics.

Objectives

In this chapter, you learn about each ECU message, including:

- Operating Messages
- Status Messages

Operating Messages

Operating Messages

Operating messages provide system information. Operating Messages include the following:

Message	*Meaning*
Stop	Defective switch is detected or the microphone is plugged into the switch jack
Retry	No switch is detected
Single Switch	¼" mono plug detected
Dual Switch	¼" stereo plug detected
Phone, Answer, Phone, Answer,……	Switch has been unplugged
Power Failure	A.C. power has been lost or disconnected

Internal Messages

Internal Messages

Internal messages provide possible error codes. These messages do not necessarily indicate a system malfunction, but you should call your local distributor if any of these messages are heard. Operating Messages include the following:

Message	*Meaning*
Function 00	Watchdog time out
Function 01	Stack error
Function 02	Watchdog test failed
Function 10	Failed third attempt to read infrared
Function 21	Parity, or overrun error (voice up/down load)
Function 30	Incorrect first digit for three-digit entry for remotes

Appendix B: Word Training List

Word Training List

Introduction

The following is a list of words that you will be asked to repeat during training.

Note

After the All-In-One asks you to train the first six words, it will go back and ask you to repeat them. If the All-In-One is satisfied that the words were recognized correctly, it will continue on with the word list. If not, it will ask you to repeat a word(s) until it is sure they can be recognized.

1. Cancel	23. Volume	45. Pause
2. Helpme	24. Up	46. Mouse
3. "The Name"	25. Down	47. Keyboard
4. Yes	26. Mute	48. Zero
5. No	27. Head	49. One
6. Retrain	28. Mattress	50. Two
7. Phone	29. Foot	51. Three
8. Television	30. Play	52. Four
9. Cable	31. Record	53. Five
10. VCR	32. Reverse	54. Six
11. Light	33. Stop	55. Seven
12. Bed	34. Toggle	56. Eight
13. Accessory	35. Enter	57. Nine
14. Allon	36. Computer	58. Ten
15. Everythingoff	37. Function	59. Eleven
16. Turnon	38. Utility	60. Twelve
17. Shutoff	39. Remote1	61. Thirteen
18. Dial	40. Remote2	62. Fourteen
19. Answer	41. Remote3	63. Fifteen
20. Hangup	42. Privacy	64. Sixteen
21. Retry	43. Appliance	
22. Channel	44. Forward	

Appendix C: Television Brand Codes

Television Brand Codes

Television Brand Codes, *continued*

Television Brand Codes, *continued*

Television Brand Codes, *continued*

Television Brand Codes, *continued*

Appendix D: Cable Box Brand Codes

Cable Box Brand Codes

Cable Box Brand Codes, *continued*

Cable Box Brand Codes, *continued*

Appendix E: VCR Brand Codes

VCR Brand Codes

VCR Brand Codes, *continued*

VCR Brand Codes, *continued*

VCR Brand Codes, *continued*

VCR Brand Codes, *continued*

Zenith	**200**
	201
	224

Appendix F: Nurse Call

Overview

Introduction

The Simplicity All-in-One and the Simplicity Switch ECU's can be ordered with the optional "*Nurse Call*" feature.

This feature allows for quick access to any signaling device connected to the Accessory Port 1 and/or any X-10 module set to house code P, unit number 15.

Objectives

In this Appendix you will learn how to use the Nurse Call feature to:

- Operate Accessory Port 1
- Operate an X-10 device set to house code P, unit number 15.

Note

The Nurse Call feature is an option. Contact your local distributor for information on obtaining this option.

The Nurse Call Command

Definition

The Nurse Call command activates any signaling device attached to Accessory Port 1 and/or an X-10 module set to house code P, unit number 15.

Nurse Call

Task:	Say:	Select:
Activate Accessory Port 1 and/or an X-10 module set to house code P, unit number 15.	**Egbert** **Nurse Call**	**Nurse Call**

Note

By default, Accessory Port 1 is always enabled, and the X-10 nurse call signaling is deleted. For more information on the use of Accessory Port 1, refer to the *"Installation Manual*", Chapter 10, *"Accessory Control"*.

Note

When the optional Nurse Call feature is installed, the main menu "Appliances" is not available.

Nurse Call X-10 Signaling

Definition

The Nurse Call X-10 signaling option allows you to:

- Turn on an X-10 module automatically when Nurse Call is selected

Note

The module used for this feature must be set to P-15. Refer to Chapter 2, *"Installation", "Setting up the Lamp Module"*, for details on how to set the house and unit code for the module.

Procedure

To configure your ECU to enable Nurse Call X-10 signaling, select [say] the following:

Enable Nurse Call X-10 Signaling

[Egbert]-Utility-Keyboard-Two-Five

You are now prompted with:

"Nurse Call Light Deleted"

Select [say] "Turnon".

The Nurse Call X-10 signaling is now enabled.

Disable Nurse Call X-10 Signaling

[Egbert]-Utility-Keyboard-Two-Five

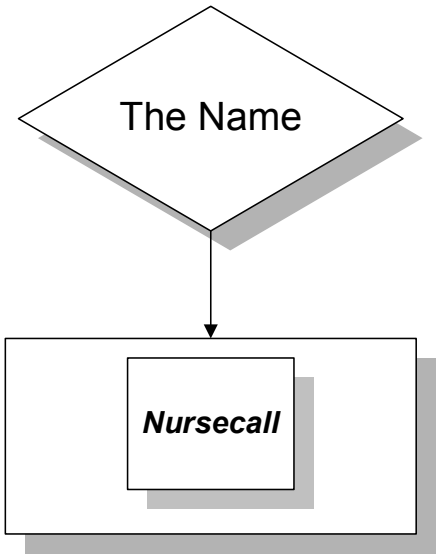
You are now prompted with:

" Nurse Call Light Enabled"

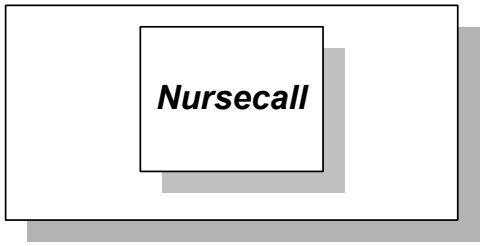
Select [say] "Shutoff".

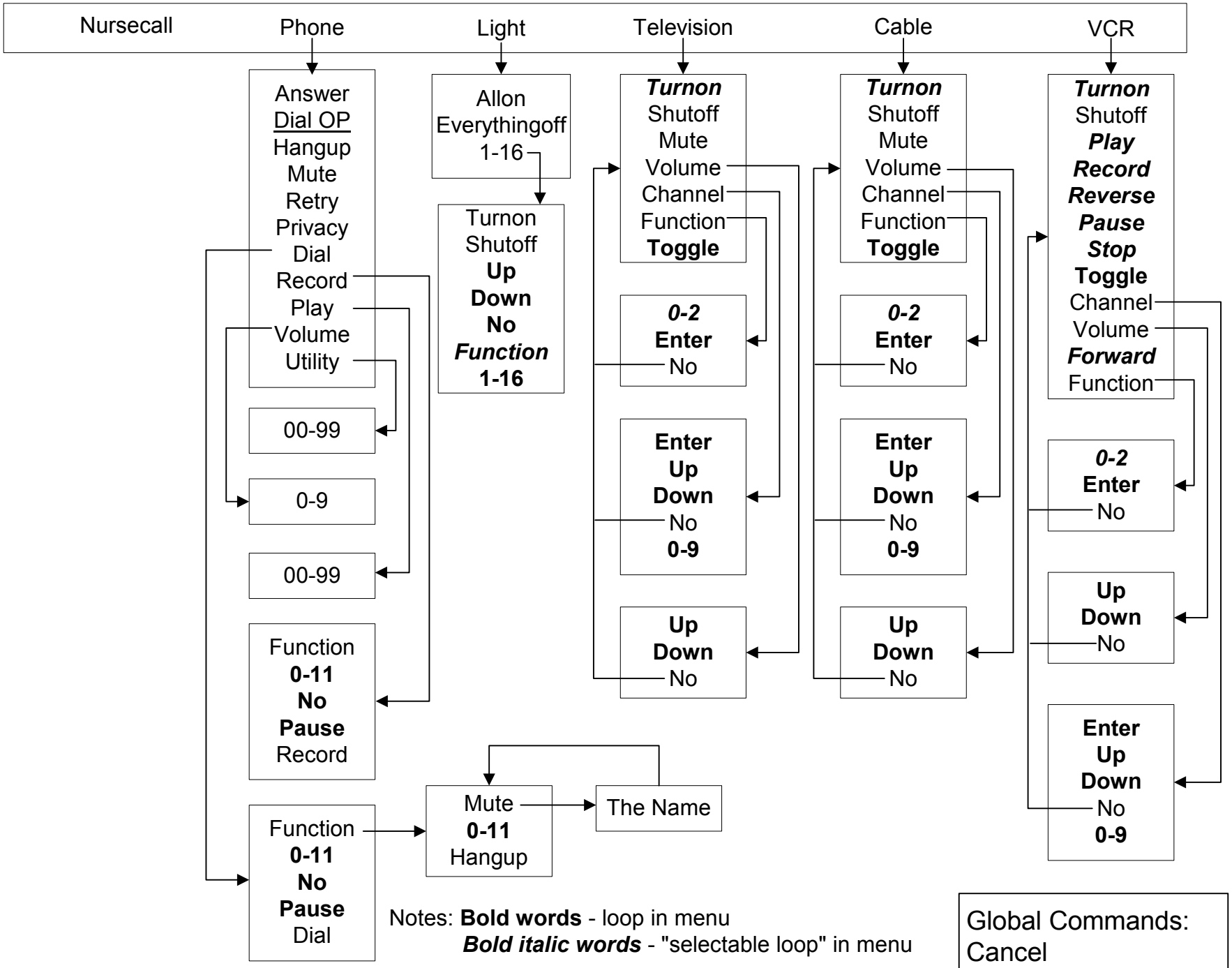
The Nurse Call X-10 signaling is now deleted.

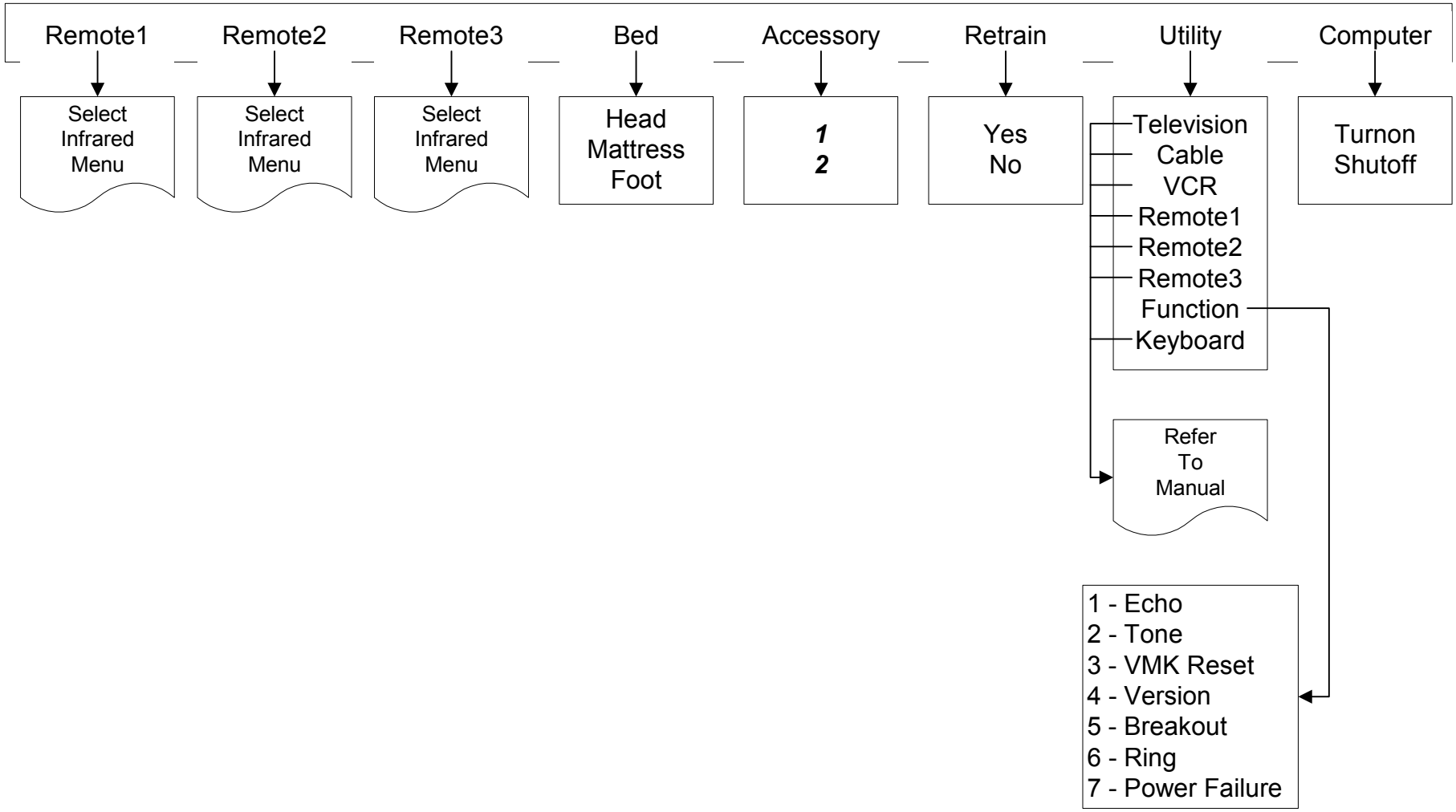
Voice Mode

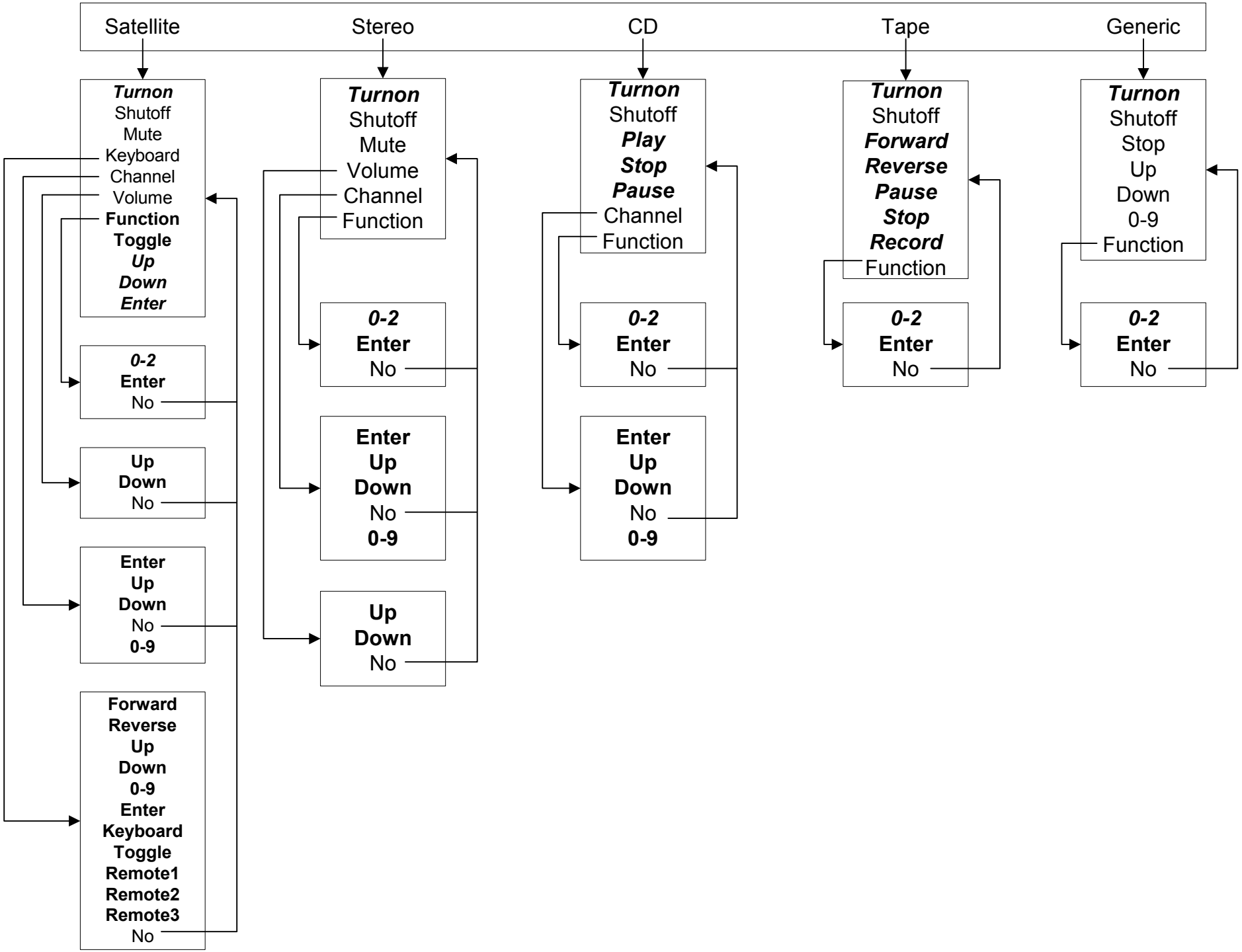


Switch Mode




Nursecall
Phone
Light
Television
Cable
VCR
Answer
Dial OP
Hangup
Mute
Retry
Privacy
Dial
Record
Play
Volume
Utility
00-99
0-9
00-99
Function
0-11
No
Pause
Record
Function
0-11
No
Pause
Dial
Allon
Everythingoff
1-16
Turnon
Shutoff
Up
Down
No
Function
1-16
Mute
0-11
Hangup
The Name
Turnon
Shutoff
Mute
Volume
Channel
Function
Toggle
0-2
Enter
No
Enter
Up
Down
No
0-9
Up
Down
No
Turnon
Shutoff
Mute
Volume
Channel
Function
Toggle
0-2
Enter
No
Enter
Up
Down
No
0-9
Up
Down
No
Turnon
Shutoff
Play
Record
Reverse
Pause
Stop
Toggle
Channel
Volume
Forward
Function
0-2
Enter
No
Up
Down
No
Enter
Up
Down
No
0-9
Notes: Bold words - loop in menu
Bold italic words - "selectable loop" in menu
Global Commands:
Cancel
Helpme


Remote1
Remote2
Remote3
Bed
Accessory
Retrain
Utility
Computer
Select Infrared Menu
Select Infrared Menu
Select Infrared Menu
Head
Mattress
Foot
1
2
Yes
No
Television
Cable
VCR
Remote1
Remote2
Remote3
Function
Keyboard
Turnon
Shutoff
Refer To Manual
1 - Echo
2 - Tone
3 - VMK Reset
4 - Version
5 - Breakout
6 - Ring
7 - Power Failure


Satellite
Stereo
CD
Tape
Generic
Turnon
Shutoff
Mute
Keyboard
Channel
Volume
Function
Toggle
Up
Down
Enter
0-2
Enter
No
Up
Down
No
Enter
Up
Down
No
0-9
Forward
Reverse
Up
Down
0-9
Enter
Keyboard
Toggle
Remote1
Remote2
Remote3
No
Turnon
Shutoff
Mute
Volume
Channel
Function
0-2
Enter
No
Enter
Up
Down
No
0-9
Up
Down
No
Turnon
Shutoff
Play
Stop
Pause
Channel
Function
0-2
Enter
No
Enter
Up
Down
No
0-9
Turnon
Shutoff
Forward
Reverse
Pause
Stop
Record
Function
0-2
Enter
No
Turnon
Shutoff
Stop
Up
Down
0-9
Function
0-2
Enter
No

Appendix G: Configuring the QVR

Overview

Introduction

The Simplicity™ Environmental Control Unit (ECU) now uses the new Quartet Voice Recognition (QVR) system. This system can now be used with users who historically could not use voice ECUs.

This document will explain how to configure the QVR for optimum performance depending on the user's voice by setting energy values ranging from one to four.

Objectives

In this chapter, you learn how to:

- Identify the different types of voices
- Adjust the energy value for a particular type of voice

Voice training considerations

Important Considerations

There are three very important factors to keep in mind as you train the ECU to recognize your voice:

- Consistency
- Pacing
- Tone

Consistency

Speaking consistently is the most important factor to remember. Your voice volume and word pronunciation should always relatively be the same.

The ECU expects you to speak words the same way every time.

As you train the ECU, be aware of how you are speaking, remembering that the ECU expects you to repeat words in the same way whenever you issue a command.

Pacing

As you train the ECU, remember to take your time. When the ECU prompts you to say a word, repeat the word to yourself before speaking into the microphone.

There is no pressure to rush through the training process. You are in control, so take as much time as you like.

Tone

Speak in your normal voice. Try to leave emotion out of your voice.

For example, when you speak the word “Yes," do not say, “Yes?” as if you were asking a question. Be firm and decisive.

Identifying Different Voice Types

Identifying Different Voice Types

There are four main voice types the QVR will work with:

1. The ***whisper*** voice. This voice is defined as a user who can only whisper and has little voice volume. The energy level for this type of voice is "**1**".

2. The ***soft*** voice. This voice is defined as a user who speaks very softly and does not have a lot of voice volume. The energy level for this type of voice is "**2**".

3. The ***average volume*** voice. This voice is defined as a user who speaks in a normal voice volume. The energy level for this type of voice is "**3**". ***(This is the default setting.)***

4. The ***loud*** voice. This voice is defined as a user who has plenty voice volume. The energy level for this type of voice is "**4**".

Changing a Voice Type for Short Train

Introduction

Once you have made a preliminary determination of the voice type, it is ***strongly*** suggested you perform a short train to make sure the energy level is appropriate.

Please see Chapter 2, Page 12 to "***Complete a Temporary Short Train***"

Configuring the Short Train Energy Level

The energy level is configured using the ***Configuration Tables*** as shown in the "Installation Manual" (Chapter 15, page 3).

The procedure to change the energy level for short train is:

[**The Name**], **Utility**, **Keyboard**, **3**, **4**

The ECU will respond with the current value. ***(Factory default is "3")***.

Enter a value from 1 to 4 depending on the voice type chosen.

The short train session will now be set for that voice type.

Changing a Voice Type for Long Train

Introduction

After you have evaluated your voice using short train, you can now set the long train energy value and proceed to do a full training.

Please see Chapter 2, Page 4 *"**Training the ECU to Recognize Your Voice**"*

Configuring the Long Train Energy Level

The energy level is configured using the ***Configuration Tables*** as shown in the "Installation Manual" (Chapter 15, page 3).

The procedure to change the energy level for long train is:

[**The Name**], **Utility**, **Keyboard**, **3**, **3**

The ECU will respond with the current value. ***(Factory default is "3")***.

You must enter two digits (one at a time) to "unlock" the system so you can enter the energy value.

Enter: "**9**", "**2**". (If these are not entered correctly, the procedure will be terminated).

After the unlock code has been entered, you may now enter a value from 1 to 4 depending on the voice type chosen.

The long train session will now be set for that voice type.