i·touch

Setup &
Users Guide

22 September 2003
Version 1.x

Contents

Setup Guide

Purpose

The purpose of the ***Setup Guide*** is to provide step-by-step instructions for properly configuring **iTouch** the first time it is being used in a new installation.

Procedure

Turning the System On

When **iTouch** has been fully installed, turn the touch screen and Server on by pressing their power buttons. The touch screen power button is on the front face of the touch screen.

Entering iTouch Setup

When the system has finished initializing, the **iTouch** Main Interface will be displayed full screen. Press the Other Stuff button found in the lower left corner of the Main Interface and then the Setup button found along the top. This will open the **Main Setup Page**. Navigation buttons to additional setup pages can be found down the right hand side of the interface.

Main Setup Page

The **Main Setup Page** allows basic configuration of **iTouch**.

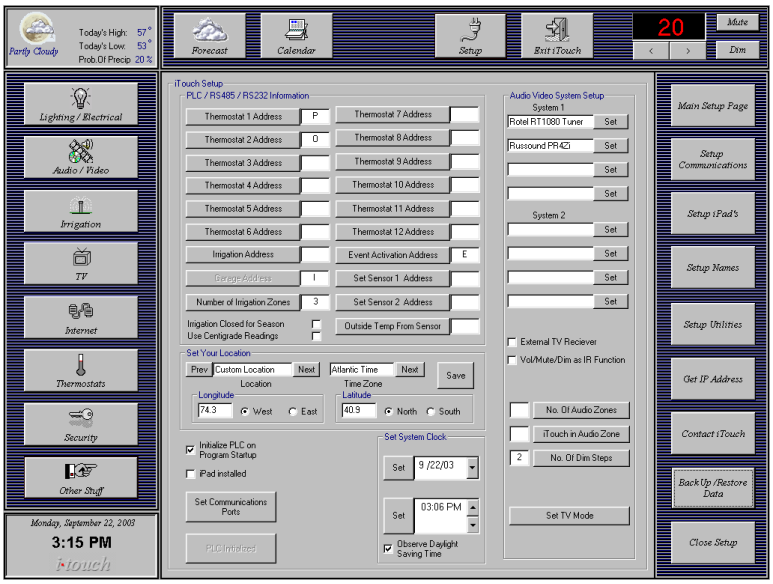


Image 1: Main Setup Page

PLC / RS485 / RS232 Information

This area of the **Main Setup Page** is used to enter the necessary address information required for proper functionality.

Thermostat "X" Address

During installation each thermostat should have been set to a specific address. If RS485, select the appropriate address 1 – 12. If Vantage, select the appropriate Master Number and Station Number. If PLC, select the appropriate house code (A – P). If Jandy, select Pool Heater, Spa Heater or Solar Heater. The thermostats will appear in the "Thermostats" interface in the order they appear in the setup menu. In other words, thermostats 1 thru 3 will appear in Group 1, thermostats 4 – 6 will appear in Group 2, and so on.

Irrigation Address

This address setting indicates to **iTouch** whether irrigation will be run via 485 or PLC. To run irrigation on RS485, from the menu select "Use 485". This will place the correct RS485 address of "1" in the box. To run irrigation on PLC, from the menu select the Irrigation House Code (typically "I").

Garage Address

This address setting indicates to **iTouch** the PLC address of Garage Doors. Note that if irrigation is being run via PLC the Garage Address will automatically default to the Irrigation Address and cannot be changed. If, however, irrigation is being run via RS485 the Garage Address of choice can (and must) be specified. It is typical to use House Code "I".

Number of Irrigation Zones

From the menu select the number of irrigation zones **iTouch** will be controlling (30 zones maximum).

Irrigation Closed for Season

When checked, "Irrigation Closed for Season" indicates to **iTouch** that the Irrigation System has been closed. Checking this box will cause **iTouch** to suspend all Irrigation activity. This allows current watering programs to be left in place without **iTouch** trying to run them until the Irrigation System is re-opened and the "Irrigation Closed for Season" box is unchecked.

Use Centigrade Readings

When checked, all thermostats and temperature sensors will read in degrees centigrade.

Event Activation House Code

iTouch has the ability to fire entire Events with a single PLC address. However, to do so an exclusive House Code must be reserved. Select a House Code to be used exclusively for firing Events. The default House Code is "E". If no PLC is used in this installation simply ignore this setting.

Set Sensor 1 & Set Sensor 2 Address

These menus indicate to **iTouch** whether or not external Temperature Sensors are present. Note that each Temperature Sensors does require a separate RS485 address. By factory default, Sensor 1 will always get address 13 and Sensor 2 will always get address 14. If installed, readings from these Temperature Sensors are displayed in the Temperature Sensors area of the Thermostats Interface. These sensors are typically used to monitor outdoor or other non-climate-controlled environments.

Outside Temp From Sensor

In the "Today's Information" section of the Lighting & Electrical Interface, as well as on the main iPad screen, there is a display of the current Outside Temperature as read by an **iTouch** Temperature Sensor (if installed). This menu allows specification of which sensor - TempSensor 1 or TempSensor 2 - is the outside Temperature Sensor and therefore tells **iTouch** which sensor reading to display in these additional areas.

Set Your Location

This section provides **iTouch** with physical location information. By providing this information **iTouch** is able to constantly calculate daily sunrise and sunset.

Location

Use the Prev and Next buttons to select a city corresponding to the location of the **iTouch** installation. Note that selecting a nearby city will provide adequate information for **iTouch** to make sunrise and sunset calculations. However, it is also possible to manually

enter location information. To do so, begin by selecting the first item in the Location list, which says Custom Location. Next, from the Time Zone drop down menu select the appropriate time zone. Finally, enter the Longitude and Latitude.

Audio Video System Setup

This area allows the customization of Audio System 1 & 2 in the **Audio/Video Interface**. These are completely customizable A/V racks consisting of four components each. From the menus select the A/V components **iTouch** will control. For detailed information on controlling A/V equipment with **iTouch** see the **Audio/Video** portion of the ***User's Guide*** found later in this manual.

External TV Receiver

Selecting this checkbox enables the **iTouch** television to be used in conjunction with an external TV receiver such as a satellite receiver. When this box is selected it causes the **iTouch** television to remain on channel 3 and then send IR commands when the channel up and channel down buttons are pressed. The channel up and channel down buttons will need to be taught the appropriate IR commands to properly address the TV receiver.

Volume/Mute/Dim as InfraRed Function

Not applicable for typical installations – please ignore.

No. Of Audio Zones

If **iTouch** will be controlling audio gear, indicate to **iTouch** the number of Audio Zones in this installation (maximum of 12).

iTouch in Audio Zone

In situations where the **iTouch** screen sits in one of the Audio Zones, instead of purchasing a separate keypad for that Audio Zone, it would be more cost effective to use **iTouch** as the keypad. If this is the case, use this selection to indicate in which Audio Zone the screen is located. The volume controls at the top right of the **iTouch** screen will now control the local zone.

No. of Dim Steps

When Dim is selected on the **iTouch** audio controls it simply dims the Audio Zone in which **iTouch** is located temporarily. By selecting a value from the Number of Dim Steps menu the amount of dimming that occurs when Dim is pressed can be customized.

Set TV Mode

The Mode should stay on the default "Allow Overlay" position.

Set System Clock

Setting the system clock assures that **iTouch** has the proper time and date, both for display purposes and sunrise/sunset calculations. Note that the current time and date will not necessarily be in the boxes. The values shown are left over from the last occasion the time and date were set.

If the area in which the **iTouch** System has been installed observes daylight savings time be sure that the Observe Daylight Savings Time box is checked.

Initialize PLC Communications

In some cases during setup it may be advantageous to disable the Initialization of the Power Line Carrier (PLC). Initializing the PLC takes a few minutes and when coming in and out of the system frequently disabling this feature speeds up the process. In this case, simply uncheck the Initialize PLC on Program Startup box. To manually initialize the system press the Initialize PLC Communications button in the lower left hand corner of this menu. *Note that the preferred setting is to always Initialize the PLC as this will keep the owner from the necessity of manually Initializing PLC Communications when the system is restarted. Note also that if PLC communication is not initialized NO PLC DEVICES WILL OPERATE FROM THE TOUCH SCREEN OR iPad.*

iPad Installed

Checking this box indicates that one or more iPad remote controls has been installed and activates the communication between the **iTouch** server and the iPad(s). To complete iPad setup see the **Setup iPads** section below.

Set Communications Ports

Set Communication Ports tells **iTouch** how to direct communication traffic. **iTouch** communicates with most devices via COM ports either on the back of the **iTouch** processor or on the TCP/IP interface. Set Communication Ports allows the installer to indicate to **iTouch** which interface or piece of audio gear is plugged into which COM port.

Setup Communications

Setup Communications allows configuration of **iTouch** with specific communication information.

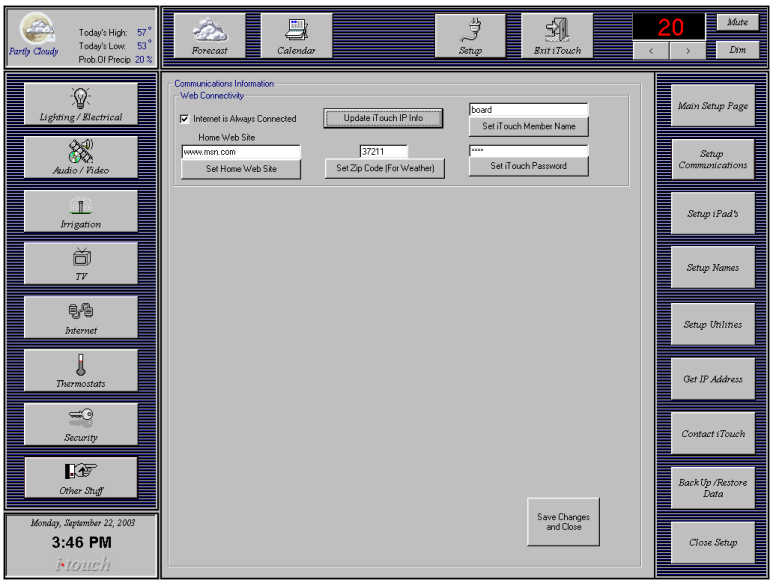


Image 2: Setup Communications Page

Web Connectivity

Internet is Always Connected

Checking this box indicates that **iTouch** has been properly connected to an always-on Internet connection.

Home Web Site

Enter the web site you would like **iTouch** to initially display when opening the **Internet** portion of the system. The web site should be entered in the format: http://www.preferredhomepage.com.

Set Zip Code (For Weather)

Enter the zip code for the home in which **iTouch** is installed. This will allow **iTouch** to obtain local weather information.

Set iTouch Member Name

Enter a Member Name to be used as the login name for remote control of **iTouch** over the Internet.

Set iTouch Password

Enter a Password to be used as the login password for remote control of **iTouch** over the Internet.

NOTE THAT ONCE THE MEMBER NAME AND PASSWORD HAVE BEEN CHOOSEN IT IS NECESSARY TO CONTACT THE ITOUCH CORPORATE OFICES WITH THIS INFORMATION, AS WELL AS THE NAME, ADRESS, AND PHONE NUMBER OF THE CLIENT.

Update iTouch IP Info

Pressing this button causes **iTouch** to read it's current IP address and publish it to the **iTouch** Members Only web page. This allows the client to log in remotely to his or her **iTouch** machine using the chosen Member Name and Password. Note that the IP address is checked daily. In the event that it has changed it is automatically re-published to the web site so that remote control remains possible.

Setup iPads

The Setup iPads utility provides the ability to edit device names so that they will properly appear on the iPads and then quickly transfer that information to the iPads.

Image 3: Setup iPads Utility

When first opening the Setup iPads utility all of the names already entered into iTouch will be displayed on the page. Note that there is a 10 character maximum for each name as no more than 10 characters are displayed on the iPad (8 characters for thermostats), so it may be necessary to edit each item so that the abbreviated name will make sense as it appears on the iPad. Once a name has been edited, save the changes by either selecting another name on the list or press the right or left arrow under the Name to Edit text box.

To "blank" an item select Set as "---". To change the item back to its original name as displayed in the Lighting & Electrical Interface select the Revert button (note that the name it will be reverted to is shown to the left of the revert button).

The More iPad functions button allows naming of irrigation programs, indication of the presence of a Multi-Disk Sony CD Changer, and access to set iPad security (typically for outdoor iPads). To set security simply check the box corresponding to the address(es) of the iPad(s) requiring security and enter a 3-digit access code. The code will then be required for access to the selected iPads.

When editing is complete choose Save As iPad Name File. This will permanently store the changes as a file on the **iTouch** system.

To transfer basic setup information to the iPads press Update iPad Functions. This will take several minutes and *must be performed the first time the iPads are set up*. To send the names to the iPads the Update iPad Names button will need to be pressed. This will be a very quick transfer of name only information and *must also be performed the first time the iPads are set up and then performed again any time name changes have been made*.

The Skip Lighting and Events checkbox should only be used when directed by **iTouch** technical support.

Setup Names

Throughout **iTouch** there are groups of buttons that have customizable names. The Setup Names page facilitates this customization.

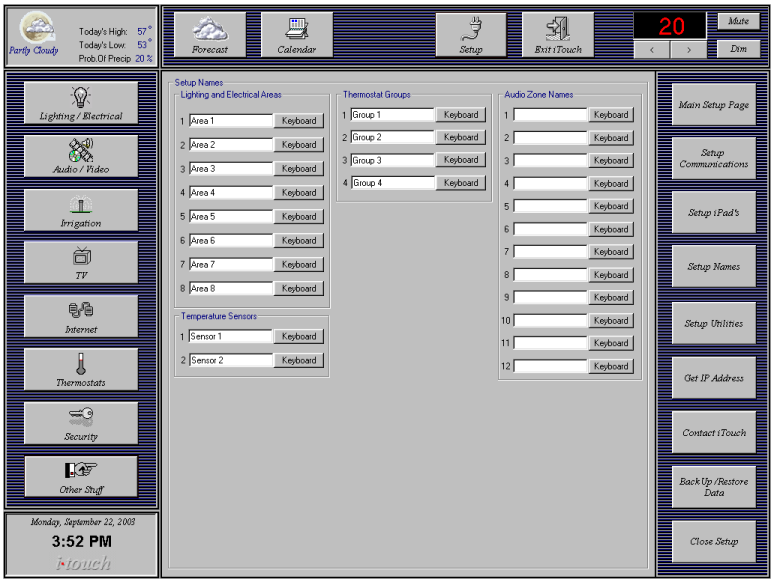


Image 4: Setup Names Page

Lighting and Electrical Areas

Enter names for the Area buttons appearing at the top of the Lighting & Electrical Interface.

Thermostat Groups

Enter names for the Group buttons appearing at the top of the Thermostats Interface.

Audio Zone Names

Enter names for the audio zones. These will appear on the pre-amplifier in Audio System 1.

Temperature Sensors

Enter names for the Temperature Sensors. These names will appear in the Thermostats Interface in the Temperature Sensors area.

Setup Utilities

The Setup Utilities provide the ability to send basic codes for diagnostic and programming purposes as outlined below.

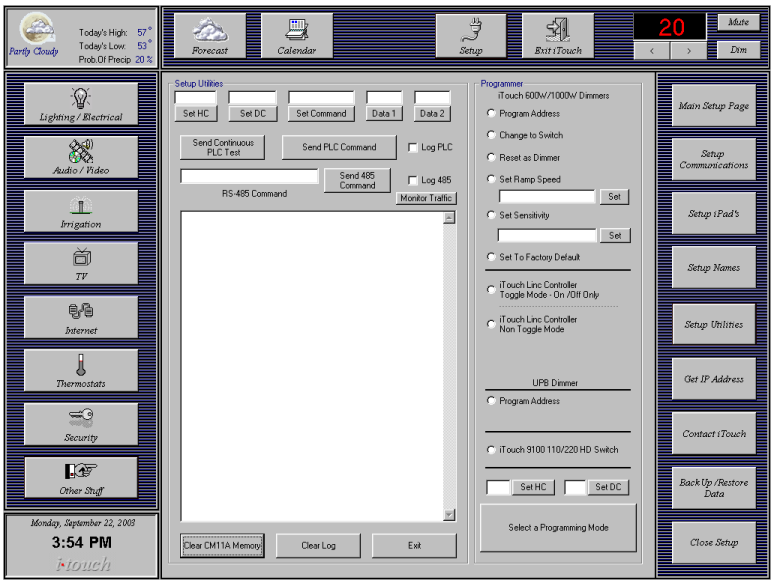


Image 5: Setup Utilities

Setup Utilities

This utility can be used to manually generate a variety of PLC and RS485 commands for diagnostic purposes.

Programmer

The Programmer is used for addressing **iTouch** PLC Dimmers**, iTouch** PLC 6 or 8 Button Controllers, and **iTouch** PLC Dual Heavy Duty Switches. For details on how to use the Programmer for addressing these devices see the individual installation manuals for these devices.

Get IP Address

Pressing this button will display the current network WAN IP address.

Contact iTouch

Pressing this button provides basic information for contacting the **iTouch** Corporate office.

Backup/Restore Data

Pressing this button allows the user to backup newly changed settings or restore settings previously backed up. Note that the data is backed up to and restored from a USD micro-drive shipped with the system. Be sure that the micro-drive is inserted into one of the **iTouch** USB ports prior to backup. Note that the USB micro-drive should remain connected to iTouch at all times for future backups.

Forecast

See **Weather** in the ***iTouch Users Guide***.

Calendar

The **iTouch** calendar is a convenient place to store family activity information.

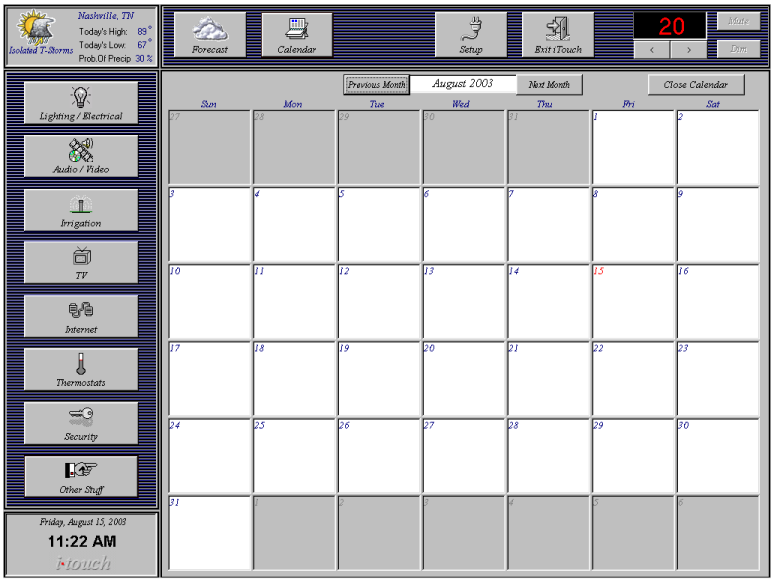


Image 6: Calendar

To store information, touch the desired date one time. This will open a box that allows specific information to be added to the calendar. Use the virtual keyboard to make additions.

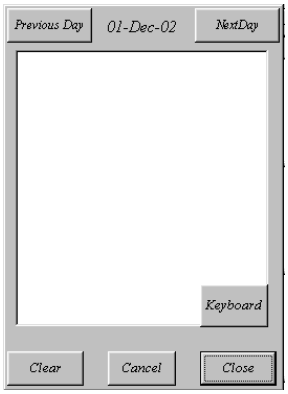


Image 7: Calendar Addition Text Box

User's Guide

Introduction

Purpose

The purpose of the **iTouch** ***User's Guide*** is to provide complete step-by-step instructions for configuring, maintaining, and fully utilizing the capabilities of the **iTouch** system.

Installation & Setup

The **iTouch** system should be completely installed and set up by an authorized **iTouch** installer. For installation of additional components or setup instructions, please contact an authorized **iTouch** representative.

Main Interface

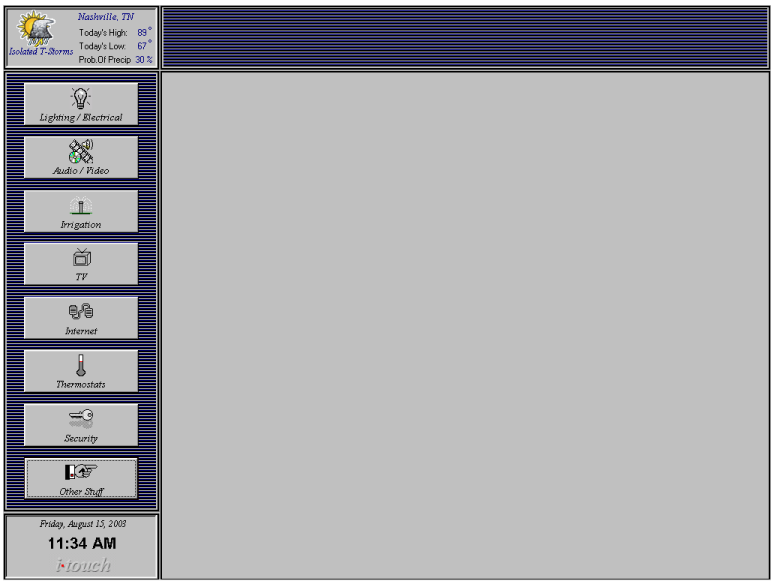


Image 8: iTouch Main Interface

The items show above are the static components of the **Main Interface** – the controls and displays that are always present regardless of the area of **iTouch** being addressed. The remaining gray zone is the Dynamic Interface Area that will show specific controls for the components currently operating – i.e. Irrigation, Thermostats, etc. To access these specific controls simply press the button that runs down the left side of the screen for the appropriate area.

Lets now take an in-depth look at the weather, audio/video controls, and time and date sections of the **Main Interface**.

Weather

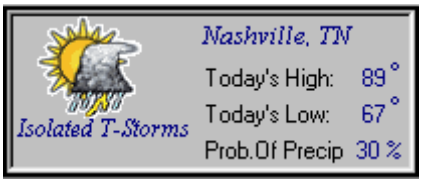


Image 9: Weather

The upper left corner of the **Main Interface** houses the current weather information. Note that for this information to be properly displayed it must be configured properly in the Setup menu. For detailed setup information please refer to the ***Setup Guide*** found earlier in this manual.

Pressing anywhere within the weather information box opens the extended forecast.

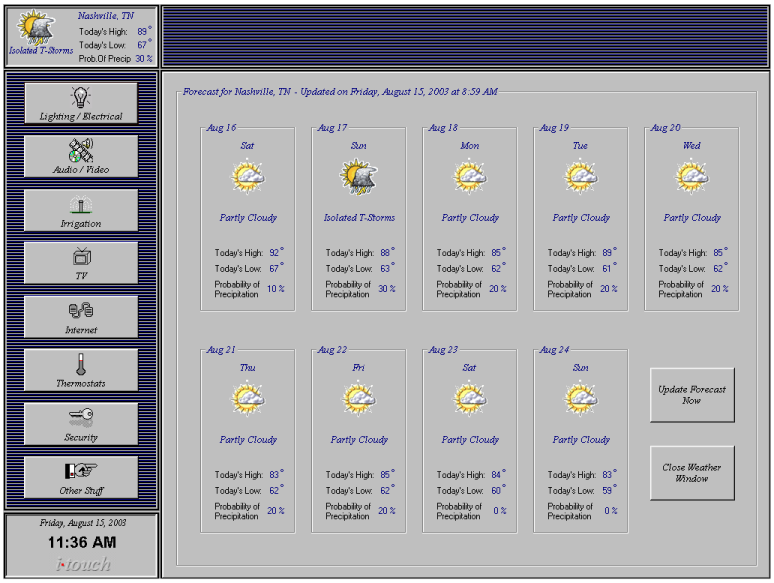


Image 10: Extended Forecast

Audio/Video Controls

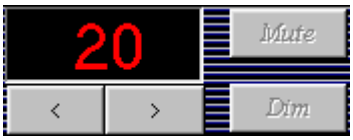


Image 11: A/V Controls

The upper right corner of the **Main Interface** houses the audio/video controls. These are only used if iTouch has been set up as one of the A/V zone controllers (as opposed to using an iPad).

Time & Date

Image 12: Time & Date Information

The lower left corner of the **Main Interface** houses the current date and time information. If the settings are not correct they can be adjusted by entering the setup portion of **iTouch**. For detailed setup information please refer to the ***Setup Guide*** found earlier in this manual.

Lighting/Electrical

Pressing the Lighting/Electrical button grants access to the detailed **Lighting/Electrical Interface**. The interface is broken down onto five distinct areas: Lighting/Electrical Controls, Areas, Today's Information, Lighting/Electrical Log File, and Events.

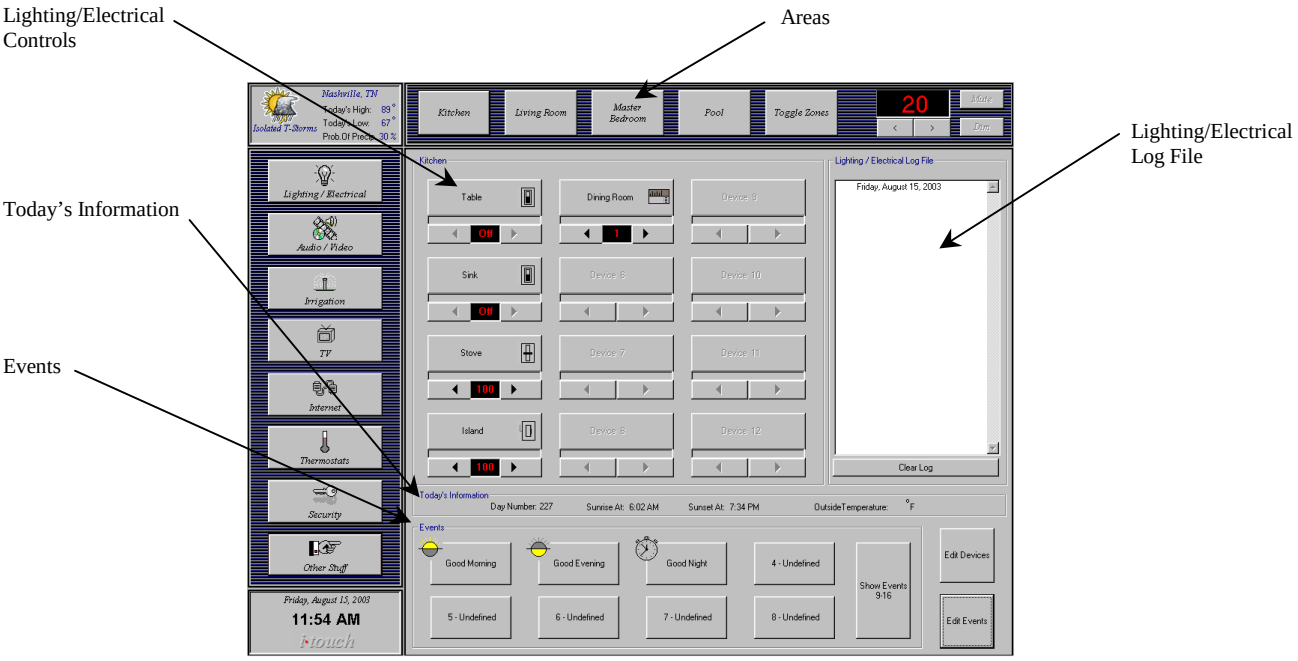


Image 13: Lighting & Electrical Interface

Lighting/Electrical Controls

In the Lighting/Electrical Controls there are twelve control buttons for operating twelve different devices. The image below details the features of an individual control button.

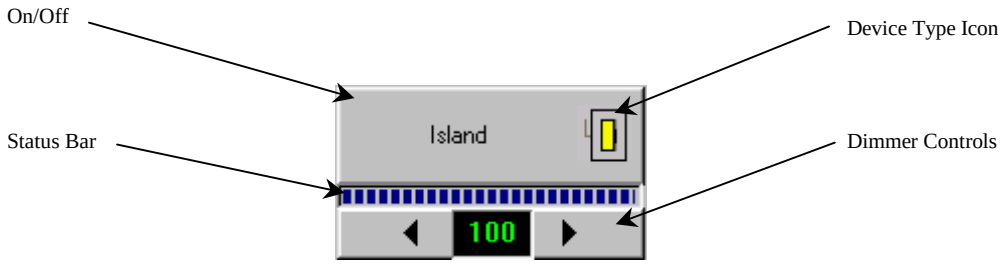


Image 14: Lighting & Electrical Control Button

On/Off: This is the main On/Off button for each device. By depressing this button the device is activated if inactive or deactivated if already active.

Status Bar: Shows the current status of the device. When the Status Bar is completely gray, the device is off. When the Status Bar is full of blue squares it is on full power. When the device is partially full of blue squares the device is on but not to full strength (applicable only for dimmable devices).

Device Type Icon: This is a graphical indicator of both the type and status of a device. This icon appears automatically as each device is set up (see Editing a Device below for details).

Dimmer Controls: These buttons either increase or decrease the dim value for the device (applicable only for dimmable devices).

Editing a Device

The Lighting/Electrical Controls area allows assignment of specific **iTouch** buttons to operate specific lamps, light switches, outlets, and so on. To add a new device or make changes to an existing one, press Edit Devices in the lower right corner of the Interface. This will open a dialog box for editing as seen in the image below.

Device Configuration

1. Begin in the Device Configuration area of the dialog box by selecting a Device Type from the menu. In Image LE3 the Device Type chosen is a Radio RA Dimmer. *Note: By choosing a Device Type, a Device Type Icon will appear on the button that shows what the Device Type is – dimmer, switch, etc. This icon will have yellow highlights when the device is On.*
2. In the Device Name text box enter the name of the device as you would like it to appear on the button in the **Lighting/Electrical Interface**. In the image above the Device Name is "Island".
3. Fill in the additional address information as required. Different information will be required for different device types (i.e. light switches vs. garage doors) and different communication protocols (i.e. Lutron vs. Vantage).

Timer Information

This set of controls allows the addition of up to four timers to each device.

1. To add a timer, begin by depressing the Timer On button next to any of the four timers to be added. This will activate the timer for this device.
2. Choose a Start Time.
3. Choose a Command from the menu. At the Start Time **iTouch** will send the selected command to this device. Choose from the following commands:
    a. Off: Turns the device off when the Event is fired.

   b. On – Last Intensity: Turns the device on to its previous intensity level. Note that for non-dimmable items this is simply On.
   c. On – Full Intensity: Turns dimmable devices on to full intensity. Not available for non-dimmable devices.
   d. Set New Intensity: Allows a new intensity level to be set for dimmable devices. To use this function press the Set New Intensity button then select an intensity value from the menu to the right. Not available for non-dimmable items.
   e. Clear: Clears the selection.
   a. Cancel: Exits the dialog box without making any changes.
4. From the Frequency menu choose how often the timer should complete this action – Everyday, Monday through Friday, etc.
5. Instead of setting specific times for devices to be commanded, **iTouch** provides the option to correlate these activities to either the sunrise or sunset. For example, due to daily changes in sunset, the appropriate time for evening outside lights to come on is always fluctuating throughout the year. Instead of adjusting the timers for these lights every few months, simply tell **iTouch** to correlate the devices to the sunset. To set up a device to correlate to either the sunrise or sunset:
   a. Depress either the Sunrise or Sunset button. This will cause the Command (On, Off, etc.) to be activated at sunrise or sunset. *Note: These buttons will not be available if the Timer On button has been depressed. If this is the case, simply depress the Timer On button again to deactivate it then choose the appropriate Sunrise or Sunset button.*
   b. To cause this activity to occur relative to the sunrise or sunset, add an Offset value by pressing the up or down arrows under the Offset Dialog Box. For example, if the device is an outside light and the timer Command is "On" with a Frequency of "Everyday" and the Sunset button has been depressed with a -20 minute Offset, the light will come on everyday 20 minutes prior to sunset.
6. Add up to four timers per device by setting timer variables for each of the four timers found in Timer Information.
7. Adding a timer to a device will automatically add an icon next to the device in the **Lighting/Electrical Interface**.

Previous/Next

These buttons allow movement from the current device to the Previous device or Next device for editing purposes.

Save

This button allows completed edits to be saved.

Close

This button closes the Edit Devices dialog box**.**

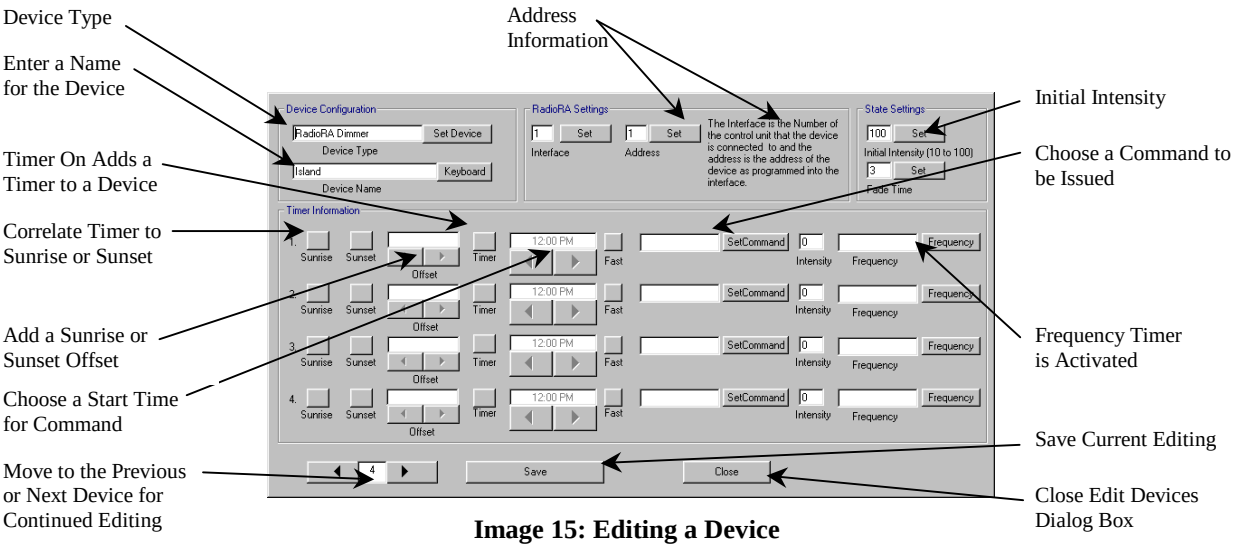


Image 15: Editing a Device

Areas

The Areas section allows simple movement from Lighting and Electrical devices 1 – 12 to devices 13 – 24, to devices 25 – 36, and so on. Pressing the Toggle Areas button grants access to Areas 5 – 8. In all, **iTouch** provides eight areas with twelve devices per area. This is a total of ninety-six Lighting & Electrical Controls.

It is recommended that like items are grouped together by Area. For example, the kitchen lights may be placed in Area 1, the den lights in Area 2, outside lights in Area 3, etc.

For information on customizing the names displayed on the Area buttons, please refer to the ***Setup Guide*** found earlier in this manual.

Today's Information

This area displays the day number, time of sunrise, time of sunset, and the current outside temperature (provided an **iTouch** temperature sensor has been installed and configured).

Lighting/Electrical Log File

The Lighting/Electrical Log File keeps a detailed account of lighting and electrical activities. It displays the time of the activity, the device affected, and the action taken (turned on, turned off, etc.). The log file may be cleared at any time by pressing the **Clear Log** button.

Events

Events are user-definable whole house actions that command multiple devices with multiple addresses in multiple zones with a single button. There are eight event buttons available at the bottom of the screen as well as a "Show Events 9 – 16" button, which displays Event buttons 9 - 16. Once configured, depressing one of these events buttons will send out multiple commands at one time. For instance, depressing a "Good Morning" event may turn on the bathroom and kitchen lights, turn off the nighttime safety lights and turn the thermostat setbacks off.

Editing an Event

To edit an event begin by choosing the Edit Events button from the Lighting & Electrical Controls main page. This will open the Select The Event to Edit dialog box. From this dialog box choose the event to edit. Note that by default these will be named Event 1 thru Event 16.

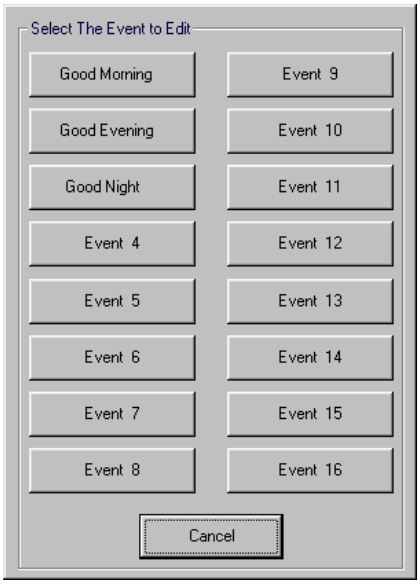


Image 16: Select The Event To Edit

Once an Event has been selected to edit the Event Information dialog box will automatically open.

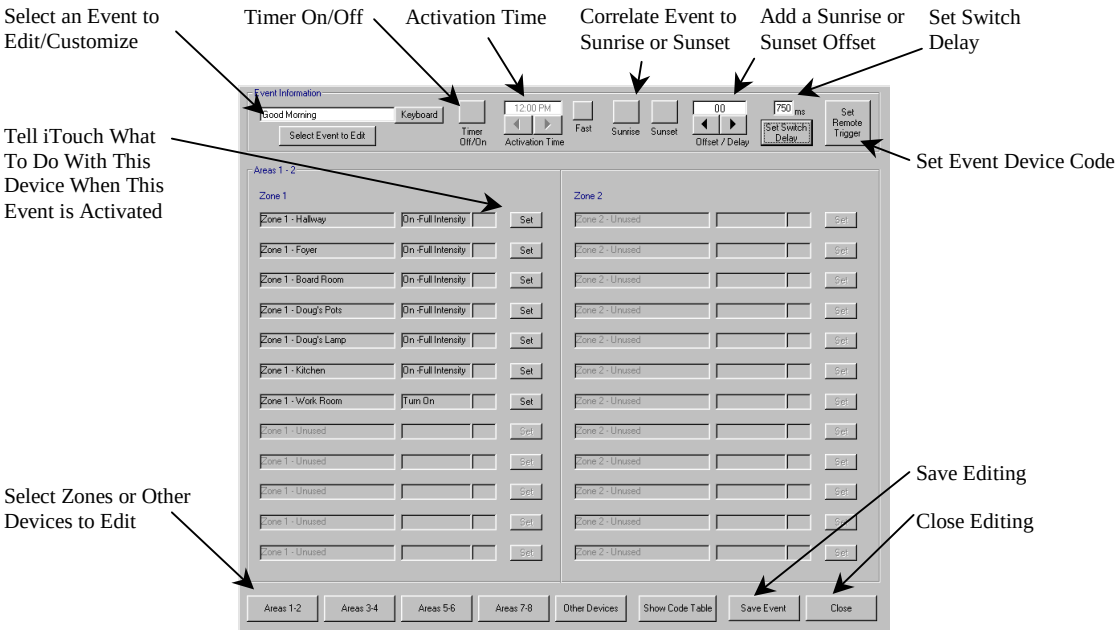


Image 17: Event Information

Event Information

This area allows customization of Events.

1. To edit the name of the currently selected Event enter the appropriate title in the text box in the upper left corner then move directly to step 2. To select a different Event to edit choose Select Event To Edit and pick the desired Event. Once the Event has been selected, the name can be customized as explained above. This is the name that will appear on the Event button in the **Lighting/Electrical Interface**.
2. To add a timer to the event, depress the Timer On/Off button and then choose an Activation Time (Note that by pressing the "Fast" button the Activation Time will jump in 30 minute increments). To correlate this event to the Sunrise or Sunset, depress the appropriate button (*Note: The Timer On/Off button must be in the Off position for these buttons to be available*). To add an offset value, use the up/down arrows under the Offset/Delay setting box. Note that using a positive Offset/Delay without a Sunrise or Sunset timer will delay the activation of the Event for the specified period of time when the Event is fired. For example, to delay the Good Night event 5 minutes change Offset/Delay to 5. Note also: Adding a timer to an event will automatically add a Timer Icon next to the event in the **Lighting/Electrical Interface**. If the Event is based on the Sunrise or Sunset, a Sunrise or Sunset icon will appear.

3. Set the Switch Delay period by pressing the Set Switch Delay button. This will indicate to **iTouch** how long to delay between firing messages during the Event (i.e. for faster firing events decrease the Switch Delay, for slower firing Events increase the Switch Delay).
4. Set a Remote Trigger for this Event by pressing the Set Remote Trigger button. By assigning a Remote Trigger to this Event, the entire Event can now be fired by a remote device. For example, a Lutron keypad can send a command that triggers the Good Morning Event. **iTouch** then sends the individual commands associated with that Event as specified below.
5. In the center of the Event Information dialog box each device in the system is listed. Note that the Area 1-2, Area 3-4, Area 5-6, and Area 7-8 buttons along the bottom of the screen allow movement between various Areas. By default Area 1-2 will be selected, displaying all Lighting & Electrical devices in Areas 1 and 2. Each item will have a Set button next to it. Press the set button next to each of the items in Areas 1-8 and make a selection form the Select a Function dialog box according to the descriptions in the next step of these instructions. Note that the default setting is No Change meaning when the Event is fired the device will not be affected at all.

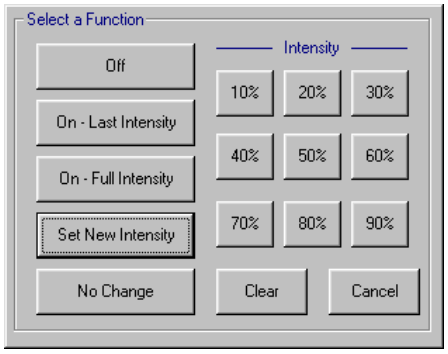


Image 18: Select a Function

6. From the Select a Function dialog box choose one of the following:
    a. Off: Turns the device off when the Event is fired.
    b. On – Last Intensity: Turns the device on to whatever intensity it was previously. Note that for non-dimmable items this is simply On.
    c. On – Full Intensity: Turns dimmable devices on to full intensity. Not available for non-dimmable devices.
    d. Set New Intensity: Allows a new intensity level to be set for dimmable devices. To use this function press the Set New Intensity button then select an intensity value from the menu to the right. Not available for non-dimmable items.
    e. No Change: Causes the Event to ignore the item altogether. This is beneficial for items like pool pumps that it may be desirable to skip during Events.
    f. Clear: Clears the selection.

   g. Cancel: Exits the dialog box without making any changes.

7. The Other Devices menu from the Event editor displays Thermostats on the left and Custom on the right. Choosing Set next to a thermostat provides the following options:
   a. Setback On: Turns the thermostat Setback on when the Event is fired.
   b. Setback Off: Turns the thermostat Setback off when the Event is fired.
   c. 2 Degrees Up: Turns the thermostat up 2 degrees when the Event is fired.
   d. 2 Degrees Down: Turns the thermostat down 2 degrees when the Event is fired.
   e. 4 Degrees Up: Turns the thermostat up 4 degrees when the Event is fired.
   f. 4 Degrees Down: Turns the thermostat down 4 degrees when the Event is fired.
   g. No Change: Causes the event to ignore the thermostat altogether (default).
   h. Cancel: Exits the dialog box without making any changes.
2. Choosing Set in the Custom menu provides the following options:
   a. Custom Electrical: To create a Custom PLC Electrical Event step first choose the House Code and Device Code to send followed by one of the following commands: All Units Off, All Lights On, On, Off, All Lights Off, Clear, Cancel.
   b. Custom AV Macro: Select the AV Macro to fire when the Event is executed. To create an AV Macro see the Name Buttons/Create Macros section of this manual.
   c. Radio RA Phantom Button Press: Allows **iTouch** to remotely press a Radio RA keypad button which has been previously set up with a string of commands.
   d. Homeworks Keypad Button Press: Allows **iTouch** to remotely press a Homeworks keypad button which has been previously set up with a string of commands.
   e. Security: Allows the security system to be armed or disarmed during an Event.
   f. Clear: Clears any previous settings.
   g. Cancel: Exits the dialog box without making any changes.

Audio/Video

Pressing the Audio/Video button grants access to the detailed **Audio/Video Interface**. This interface provides controls for the **iTouch** MP3 Player and Television as well as those external components already in the home such as CD players and Tuners.

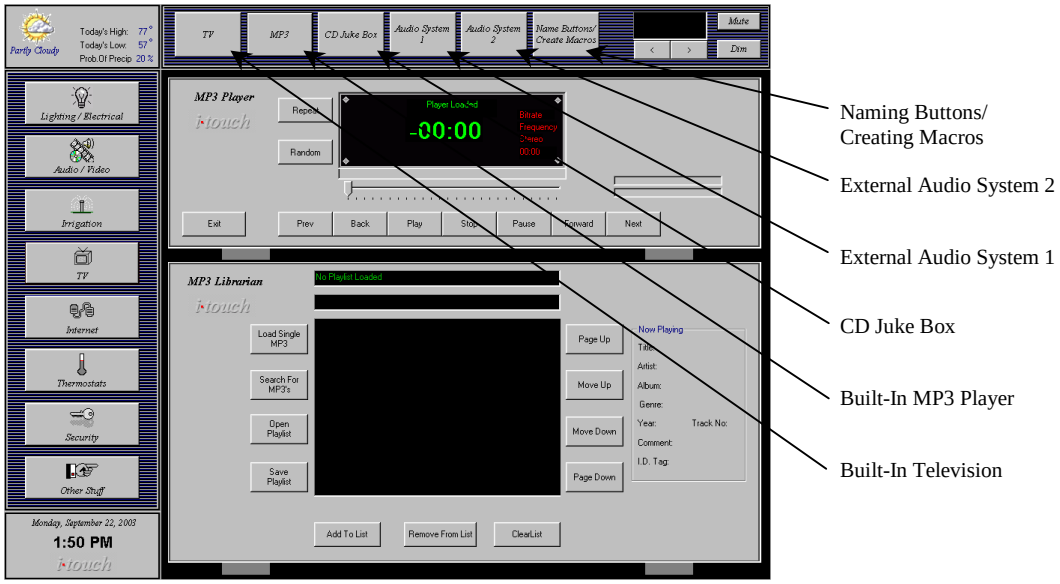


Image 19: Audio/Video Interface

Television

Depressing the TV button from the **Audio/Video Interface** opens the built-in television.

Image 20: Television

TV On/Off

Depressing the Turn Off button turns the television image and sound off. Depressing the button again turns the television back on.

Changing Channels

The Channel Down and Channel Up buttons simply change the television channel currently being viewed in the direction of choice. The newly selected channel is shown in the Current Channel window. Note that if "External TV Receiver" is checked on the Main Setup Page the Channel Down and Channel Up buttons will not actually change the TV channel. Rather, the channel is permanently set to channel 3 and the Channel Down and Channel Up buttons can be taught IR commands to change the channel on the external receiver.

Mute TV

Depressing Mute TV will temporarily turn the television audio off. Pressing the button again will re-enable the audio.

Full Screen

Depressing the Full Screen button changes the television from its default inset mode, where the **iTouch** interface buttons are visible down the left side and across the top, to a full screen mode. To return to the inset mode simply press the same button again, which now reads "Inset".

Favorites

Depressing the Favorites button opens 8 TV channel "shortcut" buttons that can be customized from the Setup menu. See the ***Setup Guide*** found earlier in this manual for details.

Input

The television tuner built into the **iTouch** system allows the capability of viewing video from several different types of video feeds. Depressing the Input button toggles the feed from the Television Tuner to Composite to S-Video. The standard setting is Tuner, as this will display the television picture. However, if a device such as a video camera is plugged into either the Composite or S-Video input, simply use the Input button to toggle to the appropriate video feed to view that video source.

Freeze

Depressing the Freeze button captures the current image being shown on the television. This is useful for remotely capturing video camera feeds.

Video

Depressing the Video button opens the Adjust Color dialog box. This dialog box allows adjustment of the brightness, contrast, saturation, and hue of the **iTouch** television. Pressing the Default button will reset the system Video to its original factory values.

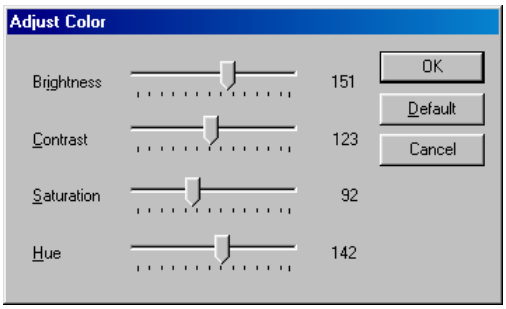


Image 21: Adjust Color Dialog Box

Setup

Depressing the Setup button opens the Channel Configuration dialog box. This dialog allows several important functions to be performed:

Auto Scan

Depressing Auto Scan will cause **iTouch** to scan all of the available television channels and lock into memory only those with a strong video feed.

Add/Edit/Delete

These buttons allow custom changes to be made to the channels **iTouch** has detected and memorized during its Auto Scan procedure. Changes to the channels can be made at any time.

Show Suites

Depressing the Show Suites button will display customizable subsets of channels. When Auto Scan is performed for the first time a subset called All Channels is created. This is the default channel Suite used by **iTouch** when moving from one channel to the next. However, additional Suites can be created, such as News, Sports, and so on, which will cause **iTouch** to move within channels of that Suite only when selected.

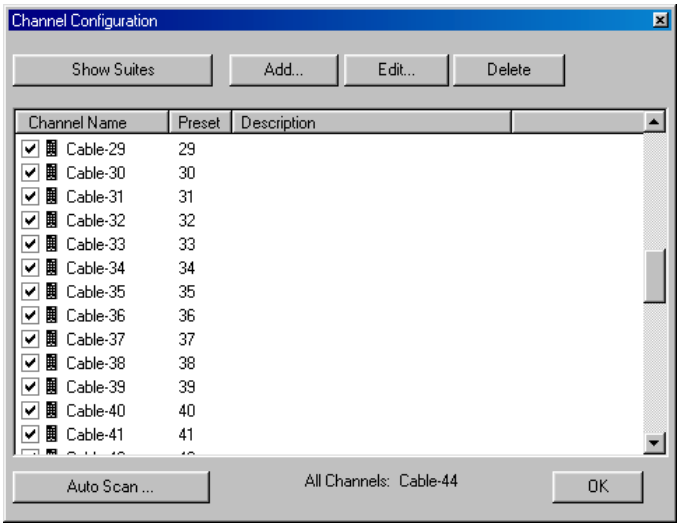


Image 22: Channel Configuration Dialog Box

MP3 Player

Depressing the MP3 button from the **Audio/Video Interface** opens the built-in MP3 Player. The MP3 Player is comprised of two components: the MP3 Player and the MP3 Librarian.

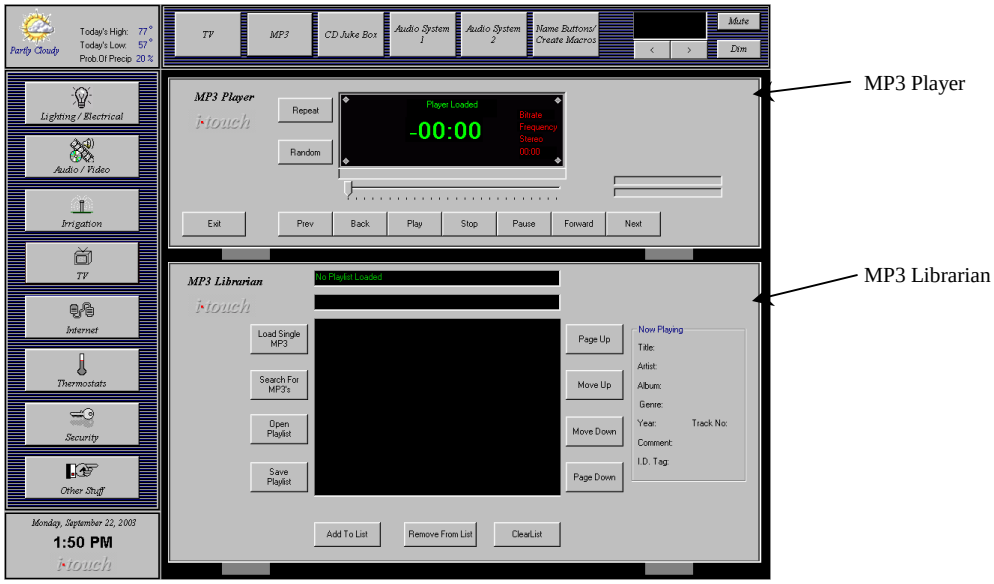


Image 23: MP3 Player

MP3 Librarian

The MP3 Librarian is the tool used to select the MP3s to be played.

Note: The MP3 Librarian allows selection from MP3s that have been stored on the hard drive of the **iTouch** *system. This manual assumes a basic familiarity with creating/obtaining MP3s and moving them to the My Music directory on the* **iTouch** *server via the household computer network. Note that the password on the My Music folder is "itouch".*

The MP3 Librarian has the following functions:

Load Single MP3: Allows selection of an individual MP3 to play. Select the MP3 to play by simply pressing the desired song.

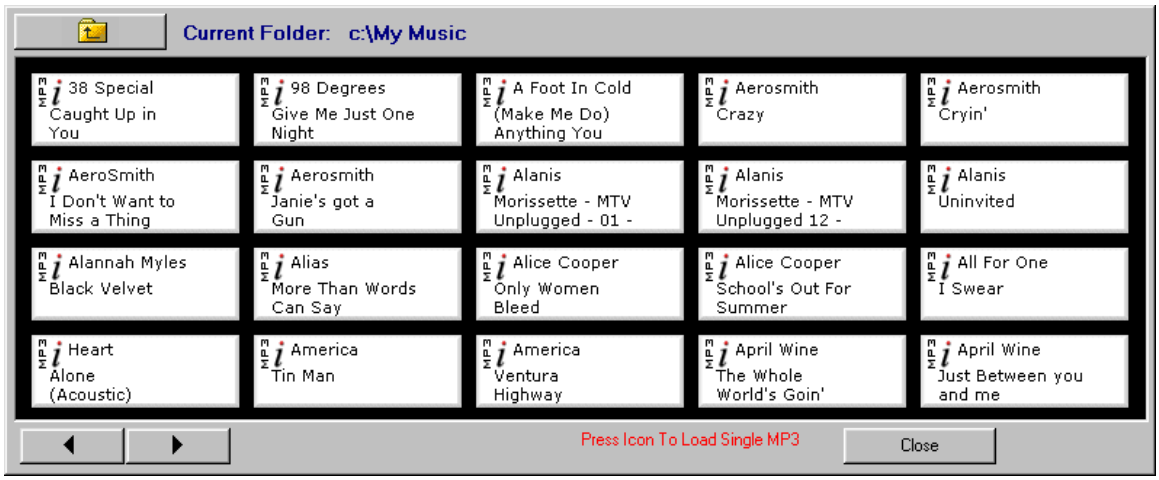


Image 24: Loading an Individual MP3

Search For MP3s: Opens the dialog box shown in the image below. First, navigate to the directory you would like to search for MP3s. (Note that the default directory is C:\My Music as shown along the top of the dialog box. To change directories begin by selecting the folder in the upper left hand corner of the dialog box, then select the folder to search.) Once the desired folder has been reached press the Search button. This will cause **iTouch** to search the selected folder and all sub-directories of that folder for MP3s. Any MP3s found will be loaded into the MP3 Librarian.

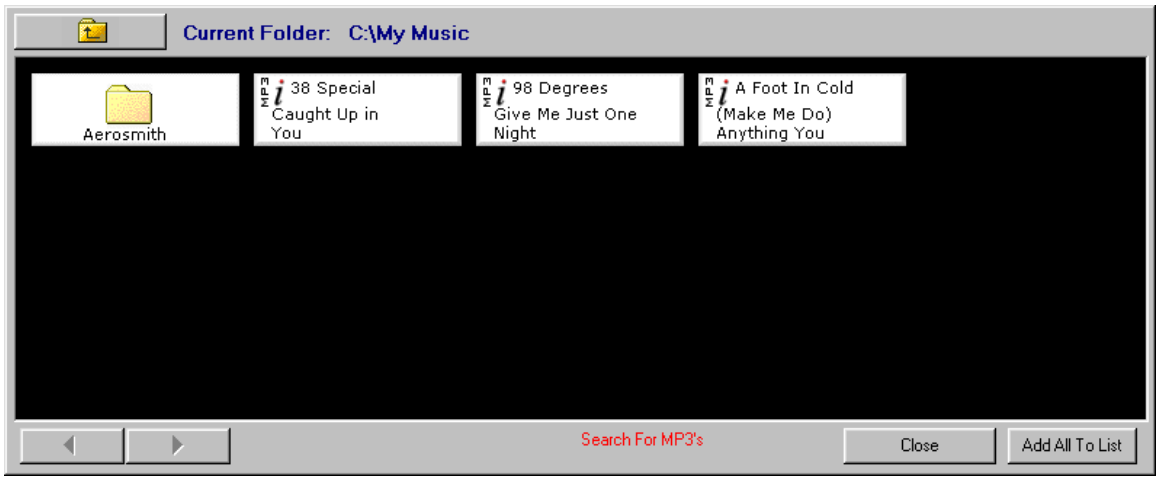


Image 25: Search for MP3s

Open Playlist: Allows the selection of a Playlist to be loaded into the MP3 Librarian. A Playlist is a user-defined group of songs that is typically segregated by style (Pop, Jazz, Rock, etc.), family member (John's Favorites, Peggy's Tunes, etc.), or theme (Dinner Time, Party, Summer Poolside, etc.). For information on defining a Playlist see Save Playlist below. Note that Playlists can be deleted by dragging them into the "Drag here to delete" box.

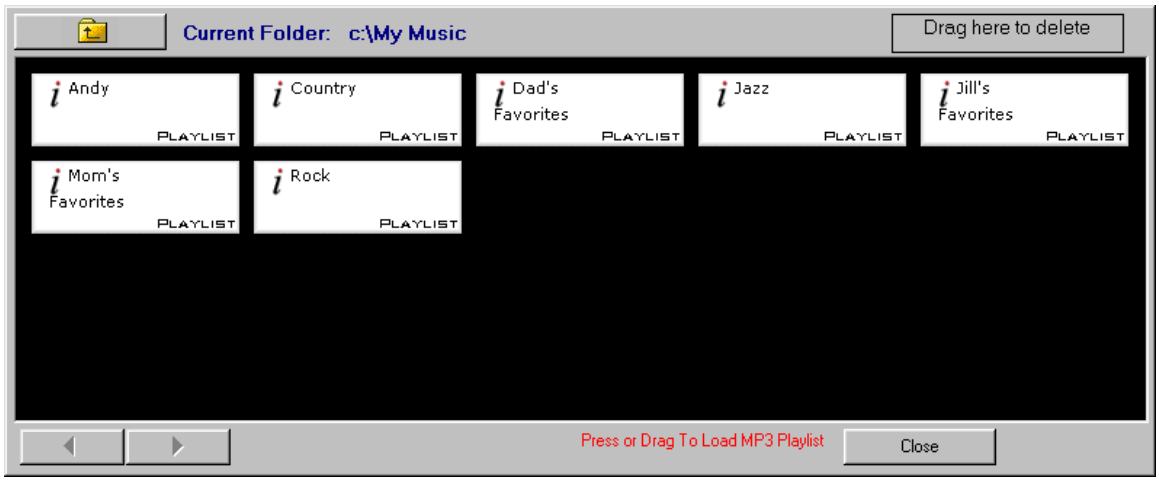


Image 26: Opening a Playlist

Save Playlist: Allows the definition of a custom Playlist. First, load the desired MP3s into the MP3 Librarian. Second, choose the Save Playlist button, which will open the dialog box as seen below. Third, name the Playlist using a standard keyboard or the **iTouch** virtual keyboard. Finally, choose Save.

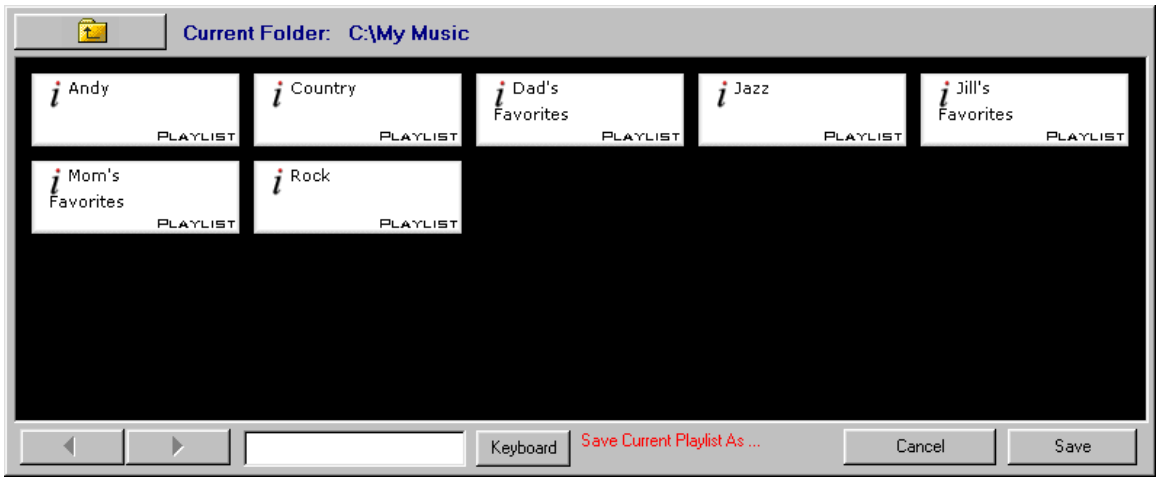


Image 27: Saving a Playlist

Add To List: Allows the addition of MP3s to the Librarian in the same fashion as Load Single MP3 above. This is useful for building Playlists or simply creating a list of songs to play one time. Note that MP3s can be added to the Librarian by either touching them or dragging them into the librarian. Note also that MP3s can be deleted by dragging them into the "Drag here to delete" box.

Remove From List: Removes the currently selected MP3 from the Librarian.

Clear List: Clears all MP3s currently in the Librarian.

Page Up: Moves the MP3 selection up one page.

Move Up: Moves the MP3 selection up one song.

Move Down: Moves the MP3 selection down one song.

Page Down: Moves the MP3 selection down one page.

MP3 Player

The MP3 Player provides the following controls:

Exit: Closes the MP3 System.

Previous: Plays the previous MP3.

Back: Jumps back 7 seconds within the MP3 currently being played.

Play: Plays the currently selected MP3.

Stop: Stops the MP3 that is currently being played.

Pause: Pauses the MP3 that is currently being played.

Forward: Jumps forward 7 seconds within the MP3 currently being played.

Next: Plays the next MP3 in the Librarian.

Repeat: Plays the current MP3 again.

Random: Plays the MP3s in the Librarian in random order.

CD Juke Box

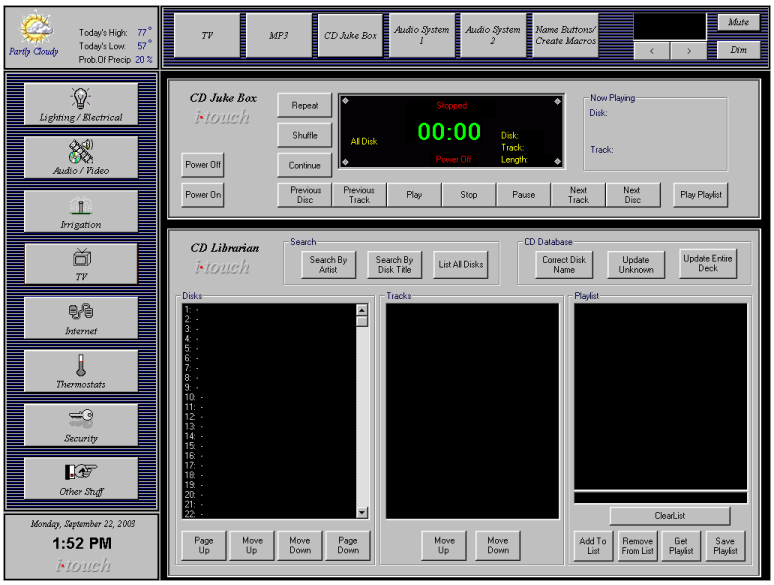


Image 28: CD Juke Box

Depressing the CD Juke Box button from the **Audio/Video Interface** opens the CD Juke Box Interface. This interface provides control for Sony CDP-CX455 400 Disk Changer. The CD Juke Box is comprised of two components: the CD Librarian and the CD Juke Box.

CD Librarian

The CD Librarian is the tool used to select the CD(s) to be played. The far left panel displays the disks loaded into the CD Player. The center panel shows the individual tracks on the currently selected disk, and the far right panel shows the Playlists that have been created. A Playlist is a user-defined group of songs that is typically segregated by style (Pop, Jazz, Rock, etc.), family member (John's Favorites, Peggy's Tunes, etc.), or theme (Dinner Time, Party, Summer Poolside, etc.).

When disks are first added to the CD Player they will appear as unknown to the **iTouch** CD Jukebox until **iTouch** is instructed to go to the Internet and retrieve information about the CDs. To get information for a single disk simply select one and then press Correct Disk Name, which will open the Disk Information dialog box as seen below.

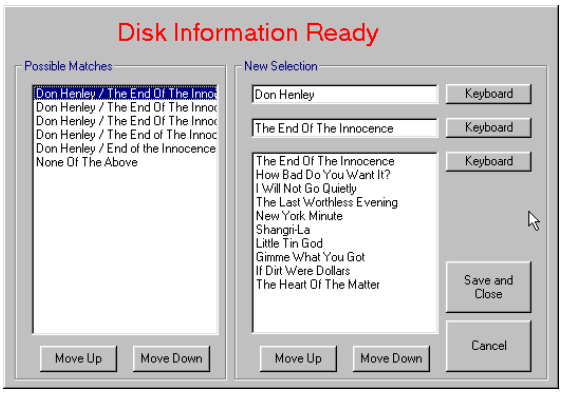


Image 29: Disk Information

Under Possible Matches select the correct album. Under New Selection edit any incorrect Artist, Title or Track information. Press Save and Close when finished. The correct information for this CD will now be displayed in the CD Jukebox.

Instead of getting information for one CD at a time, the first time the CD Player is loaded the Update Entire Deck button can be pressed. The CD Player will then automatically go through one disk at a time gathering information. This process may take several hours but will happen without further assistance.

If several new disks have been added after the initial update of the entire deck, the Update Unknown button may be pressed. This will cause **iTouch** to only update CDs with no current information.

Once the Disks have been updated the following functions can be utilized:

Search By Artist: Press the button and select a letter of the alphabet corresponding to the desired artist.

Search By Disk Title: Press the button and select a letter of the alphabet corresponding to the desired album title.

List All Disks: Returns the CD Librarian to displaying all information on all disks.

To following buttons help to create and use Playlists.

Add To List: Allows the addition of individual CD tracks to a Playlist.

Remove From List: Removes the currently selected track from the Playlist.

Get Playlist: Retrieves previously created Playlists.

Save Playlist: Saves the current additions to a new Playlist or over an existing Playlist.

CD Juke Box

The CD Juke Box provides the following controls:

Play: Plays currently selected track.

Stop: Stops the current selection.

Pause: Pauses the current selection.

Previous Track: Plays the previous track on the current album.

Next Track: Plays the next track on the current album.

Previous Disk: Plays the first track on the previous CD in the CD Player.

Next Disk: Plays the first track on the next CD in the CD Player.

Play Playlist: Plays a Playlist selected from the CD Librarian.

Repeat: Repeats the current track.

Shuffle: Press once to randomly play tracks on the currently selected CD. Press again to randomly play tracks throughout the CD Player.

Continue: Exits Repeat or Shuffle mode and returns to conventional operation.

Audio System 1 & 2

Audio System 1 and Audio System 2 are user-definable audio/video (A/V) component racks. An example is shown in the image below. Each System allows the selection of up to four different components for **iTouch** to command. Customizing the components that appear in Audio System 1 and 2 is done utilizing the Setup menu. For complete information on building a custom Audio System see the ***Setup Guide*** found earlier in this manual.

This manual assumes that the Audio/Video equipment is already properly hardwired to **iTouch (**For details on setting up "hardwired" audio/video components see the separate Audio/Video Installation and Setup Guide), which means that complete control should now be available for the attached A/V gear from **iTouch**.

For detailed information on re-naming A/V component buttons, and creating custom macros, see the detailed Name Buttons/Create Macros section below.

Once properly configured, operation of audio/video gear is as simple as pressing the buttons on the screen to operate the components as if standing directly in front of the components themselves. It may be necessary to become familiar with the equipment from the manufacturer's product manual in order to fully understand equipment operation.

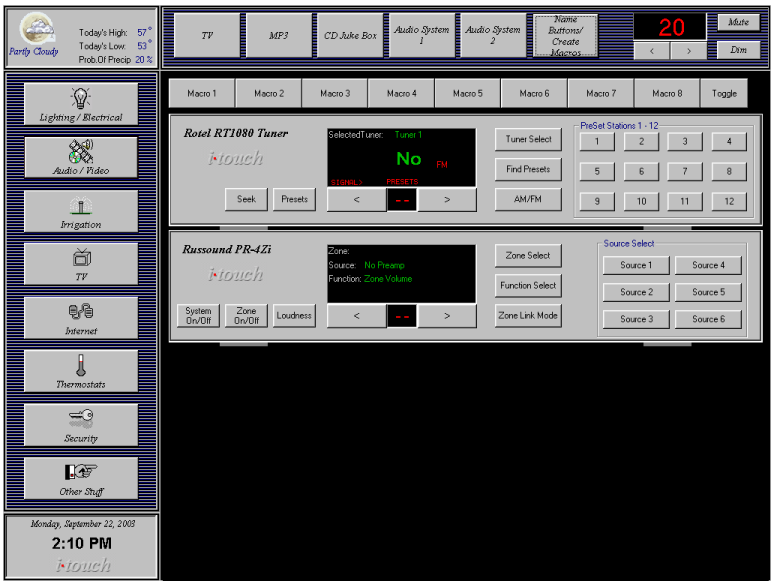


Image 30: Customized Audio System

Name Buttons/Create Macros

The Name Buttons/Create Macros button found along the top of the **Audio/Video Interface** allows **iTouch** to rename some buttons on individual audio/video components, and create custom macro commands.

Rename Buttons

To rename buttons on the A/V components:

1. Open the Audio System (1 or 2) where the component is located.
2. Press Name Buttons/Create Macros from the top of the **Audio/Video Interface**.
3. Press "Select a Button To Name" and then select the button on the audio/video component to be renamed. Note that only a few buttons on each component may be re-named (such as the source buttons on a pre-amplifier).
4. In the ReName Button text box enter the new name.
5. Press Save New Name.
6. To rename additional buttons repeat steps 3 – 5.

Custom Macros

Custom Macros are useful for creating a single button that will fire multiple A/V commands. These Macros can then be used independently or fired with an Event (such as

turning the preamp and tuner on and going to FM preset 4 every time the entertaining Event is activated). To create a Custom Macro:

1. Open Audio System 1 or 2.
2. Press Name Buttons/Create Macros from the top of the **Audio/Video Interface**.
3. Press Select Macro To Learn.
4. From the menu that appears on screen select the Macro to learn (Macro 1 – 16)
5. Press the buttons on the A/V components in the order that they should be executed when the Macro is fired.
6. Press Save Macro.
7. Use the virtual keyboard to name the Macro. When pressing Enter on the keyboard the Macro will be saved to the Macro bar across the top of the interface.

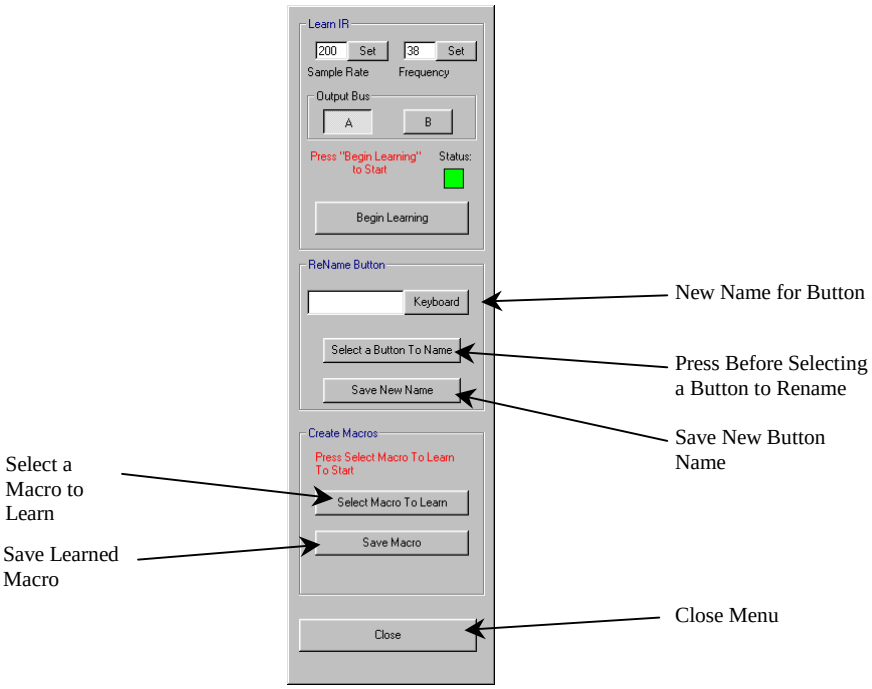


Image 31: Name Buttons/Create Macros

Irrigation

Pressing the Irrigation button grants access to the detailed **Irrigation Interface**. The two **iTouch** Irrigation Boards provide facilities to manage up to 15 and 30 Irrigation Zones respectively.

*Before continuing, please re-visit the **Setup Guide** found earlier in this manual and indicate to* **iTouch** *the number of Irrigation Zones to be controlled and the address of the Irrigation Board.*

The Irrigation Interface is broken down into five distinct areas: Irrigation Zones, Irrigation Programs, Irrigation Controls, Irrigation Log, and Time Control.

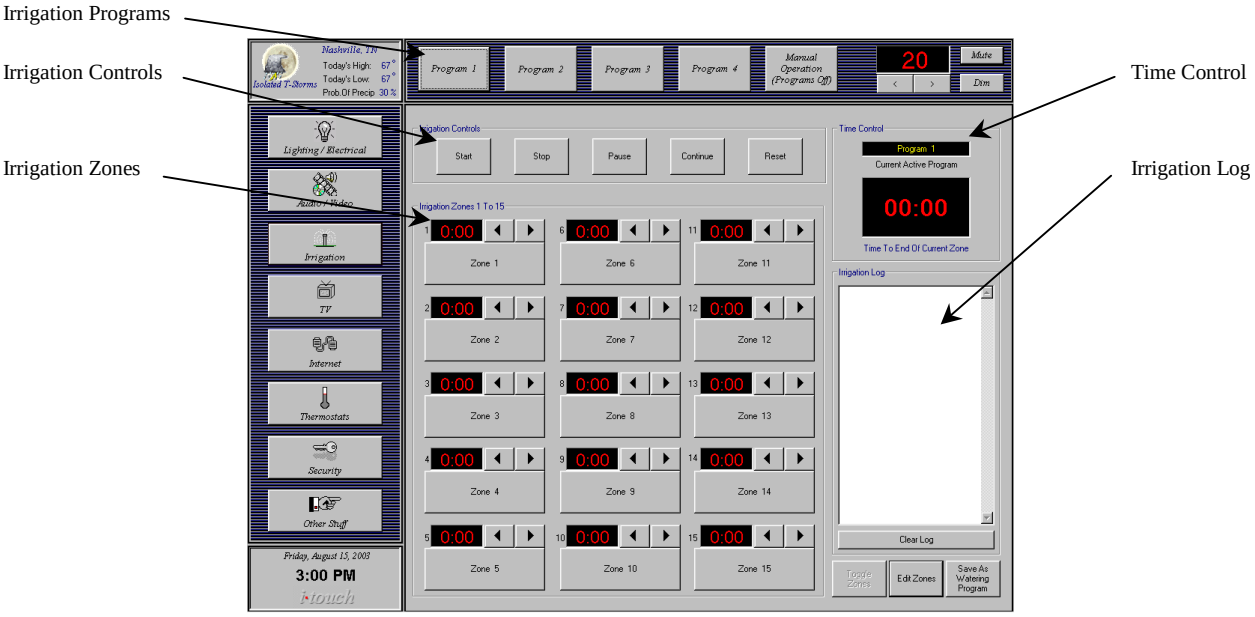


Image 32: Irrigation Interface

Irrigation Zones

To control a single Irrigation Zone, begin by depressing the right or left arrow button to add or subtract time to that Zone. Time is added or subtracted in 15-second increments with a maximum watering time of 60 minutes per zone. Once the desired watering time has been selected depress the Zone button to begin watering. *Note: The watering time display will appear red when the Zone is prepared to water, green during watering, and yellow when watering has been completed.*

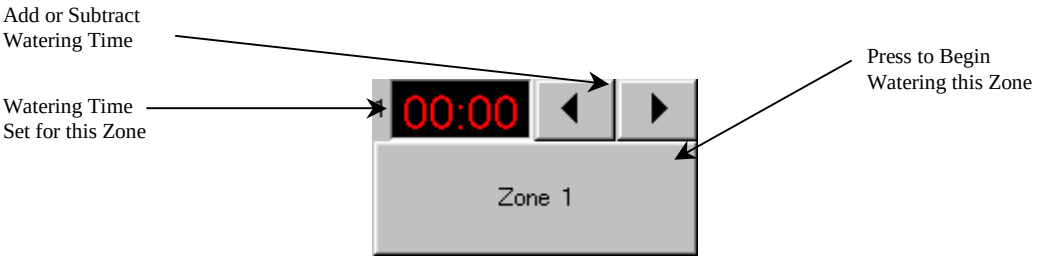


Image 33: Individual Irrigation Zone Control

Editing Zones

In order to customize the individual Irrigation Zones, select Edit Zones from the lower right hand corner of the **Irrigation Interface**.

1. From the menu select the Zone to edit. Note: The number of Zones available is based on the number of Irrigation Zones indicated in Setup. Refer to the ***Setup Guide*** found earlier in the manual for more information.
2. In the Zone Description text box enter the name of the Zone as it should appear on the button in the **Irrigation Interface**. In the image below the Zone Description is "Zone 1" but could be something more descriptive like "Front Flower Beds". Note: The text will appear laid out on the button exactly as it is entered in the text box.
3. Under the Zone Description text box select a Relay Number (1 – 30). This indicates to **iTouch** which relay or terminal the lead for this zone has been plugged into on the irrigation board during installation. Select Save to save editing.
4. Select Previous or Next to edit another Irrigation Zone or Exit to return to the main **Irrigation Interface**.

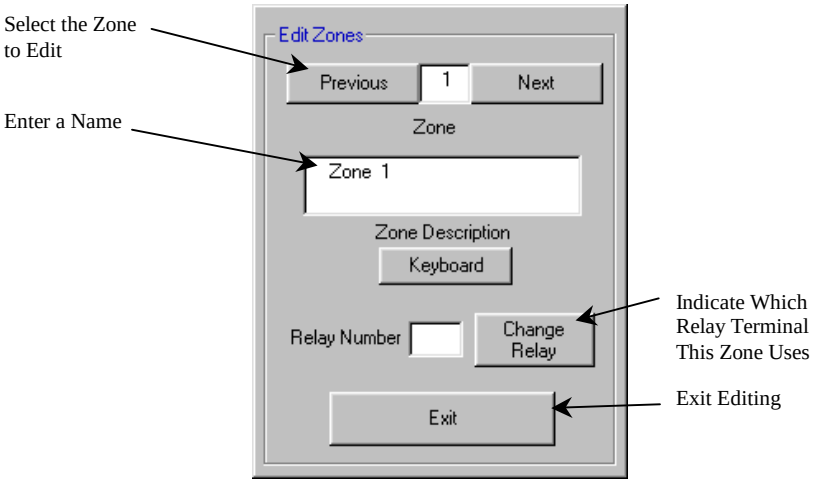


Image 34: Editing Irrigation Zones

Programs

Once Zones have been properly named and assigned Relay Numbers, Irrigation Programs can be developed. Five Program buttons appear along the top of the **Irrigation Interface**. The button on the far right, "Manual Operation", has been pre-designated as the Program to be used for manual watering only. For example, if arriving home at the end of the day the grass on the West side of the driveway needs a little water, the "Manual Operation" button allows the addition of a few minutes of watering to that zone without running an entire Program. The remaining buttons represent four completely customizable watering Programs. For example, one Program may be set up for normal watering, one for light watering, one for flowerbed watering only, and one for grass only. This allows the watering pattern to change according to changes in weather patterns.

Editing Programs

In order to customize the individual irrigation programs, follow the steps outlined below:

1. In the **Irrigation Interface** add the appropriate amount of time for each zone to water when this Program is executed. Note that a zone with "0:00" will cause **iTouch** to skip watering that zone during execution of this Program.
2. Select the Save As Watering Programs button from the lower right hand corner of the **Irrigation Interface**. This will bring up the menu shown below.
3. Select the Program (1, 2, 3, or 4) to save the settings to.
4. If desired, enter a new name for the Program. This is the name that will appear on the Program button in the main **Irrigation Interface**.
5. Select a Start Time for the Program. This will be the time of day the Program will be initiated.
6. Select one or more boxes in the Days To Water section. This will indicate which days of the week the Program will be activated. Note that selecting "Even Days", "Odd Days", "Every Third Day", or "Every Other Day" will make the individual day selections unavailable.
7. Select Save to save your editing.
8. Select Exit to return to the main **Irrigation Interface**.

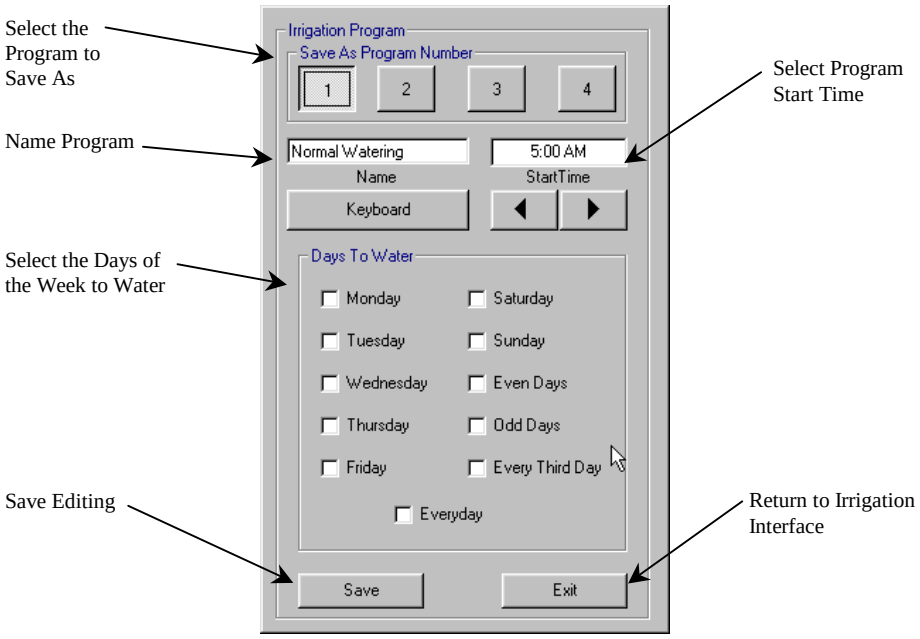


Image 35: Saving Irrigation Programs

Irrigation Controls

The Irrigation Controls provide manual commands for Irrigation Programs. To use the Irrigation Controls, when entering the **Irrigation Interface** begin by selecting the Program to be initiated. Once the Program has been selected, use the Irrigation Controls to Start, Stop, Pause, Continue, or Reset the Program. *Note: Programs that have been assigned a specific Start Time and Days To Water will begin and end automatically and do not require use of the Irrigation Controls. However, the Irrigation Controls can be used to temporarily override these settings.*

Start: Begins the current Irrigation Program.
Stop: Ends the current Irrigation Program.
Pause: Pauses the current Irrigation Program in progress.
Continue: Continues a previously paused Irrigation Program.
Reset: Resets saved time settings for all Zones of an Irrigation Program.

Irrigation Log

The Irrigation Log keeps a detailed account of Irrigation activities. It displays the time of the activity, the Zone affected, the action taken (turned on or turned off) and the total watering time for each Zone. To clear the log file simply depress the Clear Log button at any time.

Time Control

The **Time Control** is a counter for the Zone currently being watered.

Internet

Depressing the Internet button grants access to the **Internet Interface** as seen below. This interface is broken down into two areas: Internet Browser and Shortcuts. *Note: To utilize the Internet the* **iTouch** *system must be part of a household computer network that subscribes to an Internet provider. If this system is not currently in place contact a local Internet provider for assistance.*

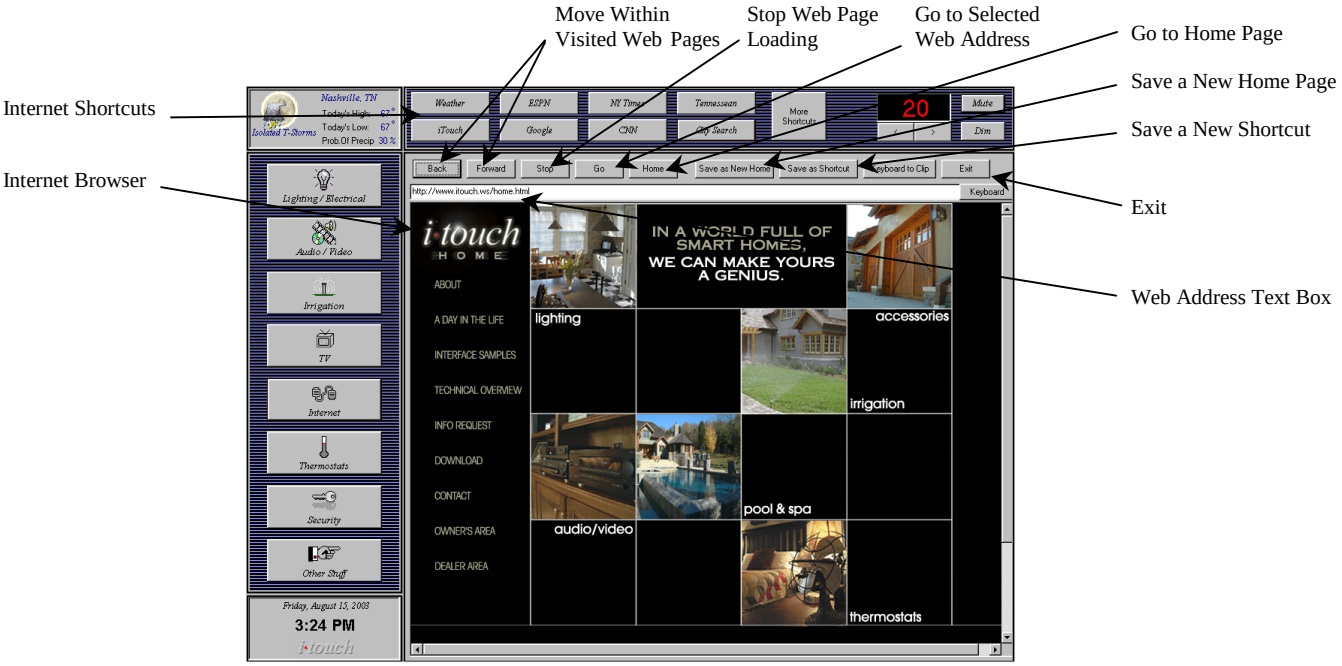


Image 36: Internet Interface

Internet Browser

The **iTouch** browser is loaded when the Internet button is depressed from the **Main Interface**. This browser allows navigation of the Internet to the destination of choice. To go to a specific web site, simply enter the address into the web address text box (i.e. www.website.com) using the virtual keyboard or a standard or wireless keyboard, and then press the *Go* button above the text button. The *Back* and *Forward* buttons allow movement within pages already visited. The *Stop* button will discontinue the current web page from loading, and the *Home* button will go directly to the pre-determined home page (see Editing Internet for details on selecting a home page).

Note: Entering text into a web page (such as a zip code, phone number, password, etc.) can only be accomplished by plugging a standard or wireless keyboard into the keyboard

cable located at the touch screen. This cannot be accomplished using the virtual keyboard.

Shortcuts

Eight shortcut buttons appear along the top of the **Internet Interface**. Depressing the More Shortcuts button will display eight additional shortcut buttons. Depressing any of these shortcuts immediately open a pre-determined web site. See Editing Internet below for details on customizing these shortcuts.

Editing Internet

Editing the Home Page

To change the default Home Page, which is the web page **iTouch** opens automatically when the **Internet Interface** is initiated or the Home button is pressed:

1. Use the browser to navigate to the web site that is the desired Home Page.
2. Press the Save as New Home button.

Note: The Home Page can also be edited in the Setup menu. For additional information see the ***Setup Guide*** found earlier in this manual.

Editing Shortcuts

To save a web page as a Shortcut:

1. Use the browser to navigate to the web site that the Shortcut will be assigned to.
2. Press the Save as Shortcut button, which opens the Save as Internet Shortcut dialog box.
3. From the menu select the Shortcut (1 – 16) to save this web page to.
4. In the New Shortcut Name text box enter the desired Shortcut name.
5. Choose Save and Exit to return to the **Internet Interface**.

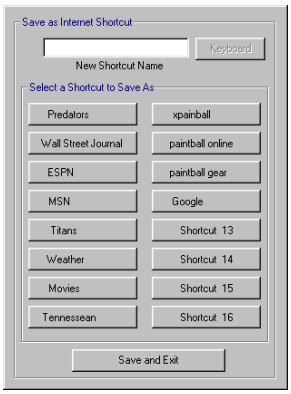
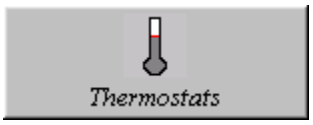


Image 37: Save as Internet Shortcut

Thermostats



Thermostats may be controlled from either the touch screen or the actual wall display units throughout the house. The communication is bi-directional; therefore a change made on a wall display unit is reflected on the touch screen and vice-versa. Let's begin by looking at how to control thermostats from the touch screen and then proceed to controlling thermostats from wall display units.

Touch Screen Thermostat Control

Depressing the Thermostats button grants access to the detailed **Thermostats Interface** as seen in the image below. The **Thermostats Interface** is broken down into four distinct areas: Individual Thermostats, Groups, Temperature Sensors, and Thermostat Log File.

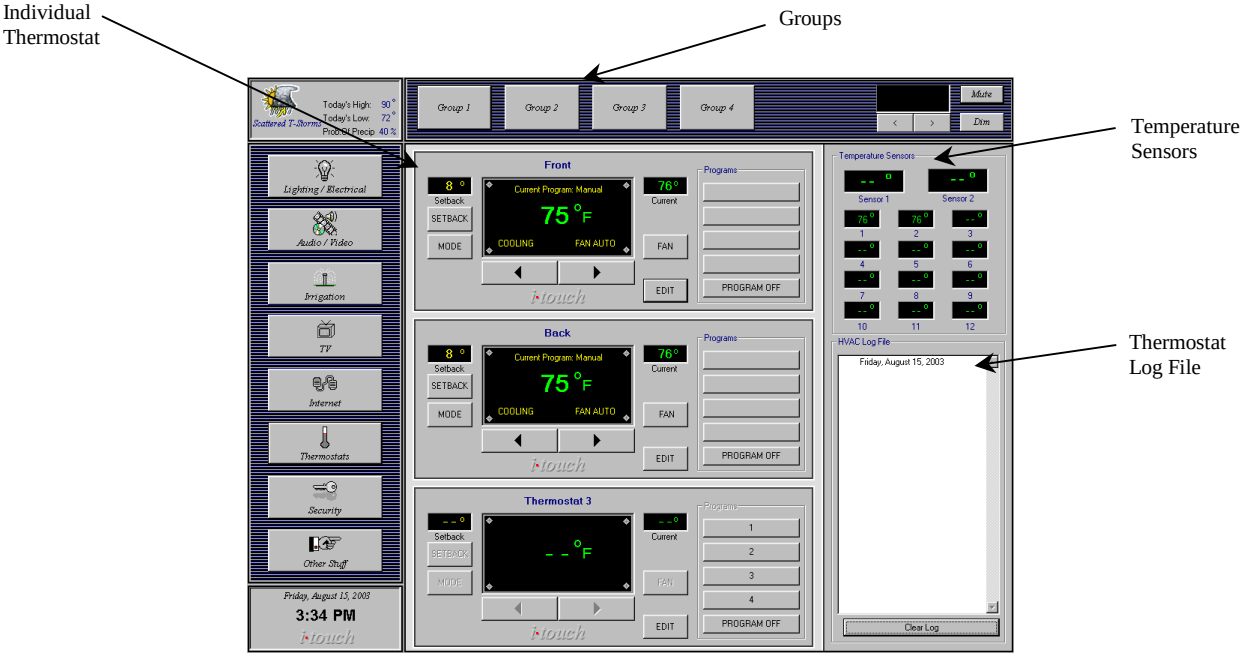


Image 38: Thermostats Interface

Individual Thermostats

In the above image three Individual Thermostats appear. Each of these thermostats has its own set of buttons and displays.

Note: In the event that all of the buttons with the exception of the Edit button appear grayed out and are inaccessible, the thermostat has not been set up for use in the Setup

Menu. Complete details regarding proper thermostat setup have been provided in the ***Setup Guide*** found earlier in this manual.

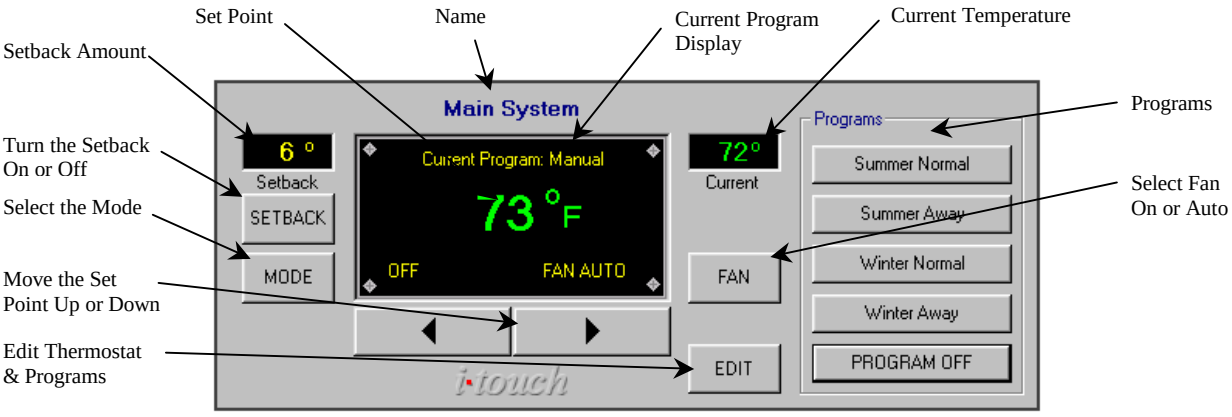


Image 39: Individual Thermostat

Set Point: The current temperature setting for this thermostat – i.e. the desired room temperature.

Name: Each thermostat has a default name that can be customized (see Editing a Thermostat below).

Current Program Display: This display shows the thermostat program that is currently active. If no program is active the display will read "Manual". For more on programs see Programs below.

Current Temperature: Shows the current temperature at the location of the thermostat. This reading comes from a built-in temperature sensor included with each thermostat.

Programs: Each thermostat can store up to four custom programs. These programs automate the action of each thermostat. To select a program, press the appropriate program button. If no program is desired (i.e. manual operation is preferred) select the "PROGRAM OFF" button. See Editing a Thermostat below for detailed information on setting up custom programs.

Fan: This button controls the fan setting. The default setting is "Auto". Pressing the button once toggles the setting to "On". Pressing the button again toggles the setting back to "Auto". Note that the Fan will be active only if the thermostat Mode is on a setting other than "Off". See Mode Selector below for more details.

Edit: Pressing this button grants access to edit the thermostat Name, Setback, and Programs. See Editing a Thermostat below for detailed information.

Set Point Up/Down: Pressing the right arrow key increases the temperature Set Point by 1-degree increments. Pressing the left arrow key decreases the temperature Set Point by 1-degree increments.

Mode: This button controls the thermostat mode, toggling between "Off", "Heating", "Cooling", and "Auto Change". When in "Auto Change" mode, the thermostat will automatically switch from heat to air-conditioning in order to maintain the Set Point temperature.

Setback: Depressing this button once activates the Setback feature as indicated by the red SETBACK ON text appearing next to the button. Depressing the button again deactivates the setback. When activated, the Setback feature automatically moves the thermostat by a user-defined Setback Amount to a new Set Point. The actual value of the Setback for each individual thermostat is displayed in the Setback Amount window just above the Setback button. Note that the temperature Set Point displayed WILL change to reflect the implemented Setback. The fact that the Setback is "On" indicates that the temperature has been adjusted by the Setback Amount. Note also that the Setback feature moves the temperature to a *higher* setting if *cooling* is on and to a *lower* setting if *heat* is on. The Setback feature is especially useful for unoccupied hours. For example, if the home is vacant at 8:00 am each morning until 5:00 pm each night, activating the Setback during those hours would be energy efficient. Assuming that the Set Point is 72 degrees and the Setback Amount is 6 degrees, activating the Setback at 8:00 am would move the temperature to 78 degrees in the summer when the air conditioning is on and to 66 degrees in the winter when the heat is on. Deactivating the Setback returns the thermostat to 72 degrees. As opposed to manually activating and deactivating the Setback, this activity can be automated using Programs or Events. See Editing a Thermostat below for detailed information on controlling Setback with Programs, or Editing an Event in the Lighting/Electrical portion of this manual for detailed information on controlling Setbacks with Events.

Setback Amount: This is a display of the actual Setback value for this thermostat. See Editing a Thermostat below for detailed information on changing this Setback Amount.

Editing a Thermostat

To edit a thermostat begin by choosing the Edit button on the thermostat to be customized.

Thermostat Settings

This area allows thermostats to be given a custom name and Setback amount.

1. In the Thermostat Name text box enter the name it should appear on the thermostat in the **Thermostats Interface**.
2. From the Setback drop down menu select the Setback amount for this thermostat.

Setup Timer Programs

These buttons provide access to edit the 4 programs available on each thermostat. Select the program to edit by depressing button 1, 2, 3, or 4.

Thermostat Program Settings

This area allows specific customizations to be made to the thermostat program selected from Setup Timer Programs. Note that the name of the program currently being edited appears to the right of the keyboard button.

1. In the Program Name text box enter the program name as it should appear on the thermostat program button.
2. From the menu on line "1." select a Frequency. This will determine the days of the week that the Command in line "1." is given.
3. Select a Time to execute this Command.
4. From the menu select the Command to be issued. This Command can turn the Setback On or Off, move the Set Point up 2 or 4 degrees, or move the Set Point down 2 or 4 degrees.
    a. *Setback vs. Set Point Up/Down: Instituting a Command which turns the Setback on will move the Set Point of the thermostat by the value chosen from the Setback drop down menu at the top of this dialog box. This Setback value ranges in 2-degree increments from 6 to 16 degrees. The advantage of using the Setback feature is that it is dependent on the thermostat mode and therefore can be programmed once and never addressed again as the seasons change. For example, let's assume that the Set Point for this thermostat is 71 degrees and it is summer, so the Mode is Cooling. If an 8 degree setback is chosen for this thermostat, and Command line "1." turns the Setback On at 9:00 am Monday through Friday, the Set Point will be moved to 79 degrees at that time on those days. Note that the temperature Set Point displayed will change. The fact that the Setback is "On" indicates that the temperature has been adjusted by the Setback Amount. If, however, the Mode is Heating, the Set Point will be moved to 63 degrees. The advantage of Setback then, is that it can be programmed once and it will adjust accordingly with the seasons. However, in some cases it may be advantageous to move the Set Point in smaller increments, such as before bed each evening. In this case a Command can be issued to move the Set Point Up or Down by either 2 or 4-degree increments. Keep in mind that a Command to move the Set Point Up 2 degrees at 11:00 pm each night will do so regardless of the thermostat Mode. This is the reason multiple programs are available. A program called Summer Normal may move the Set Point Up 2 degrees each night while a program called Winter Normal would likely move the Set Point Down 2 degrees.*
5. Continue adding Commands on lines "2.", "3.", "4.", and so on. Up to 8 Commands can be saved with each program.

Save

This button saves the completed editing.

Close

This button closes the thermostat editing feature.

Controlling Thermostats with Programs vs. Events

It is important to understand that thermostats can be automatically controlled with either Programs or Events. For example, a Program may be used to move a thermostat up 2 degrees at 11:00 pm each night during the summer and then back down to the original Set Point at 6:00 am. However, the same command could be sent as part of an Event from the **Lighting/Electrical Interface**. For example, an Event called "Good Night" might turn off all of the evening lights, turn on the nighttime safety lights and move the Set Point up 2 degrees. A second Event called "Good Morning" would do just the opposite. These Events could be triggered manually or set on a timer to trigger automatically (for more information on controlling thermostats with Events see **Editing an Event** in the **Lighting/Electrical** portion of this manual). As another example, a Setback may be instituted from a Program to come On at 9:00 am and go Off at 5:00 pm. The Setback could also be part of an Event called "Going Out" which turns the Setback On, lights Off and so on, and an Event called "I'm Home" which turns the Setback Off and the lights On. ***Be aware that there is a danger in the possible overlap of Programs and Events.*** For instance, in the first example above, if a Program moves the Set Point up 2 degrees at 11:00 pm each night, and the same command is sent from an Event called "Good Night", the cumulative effect is a *4 degree Set Point change.* If the Program moves the Set Point back down 2 degrees but there is no morning Event to do the same, the thermostat will now be 2 degrees higher than the previous day. This cycle could continue, inching the Set Point up 2 degrees each day. ***It is best to choose to control individual thermostats with either Programs or Events, not both.***

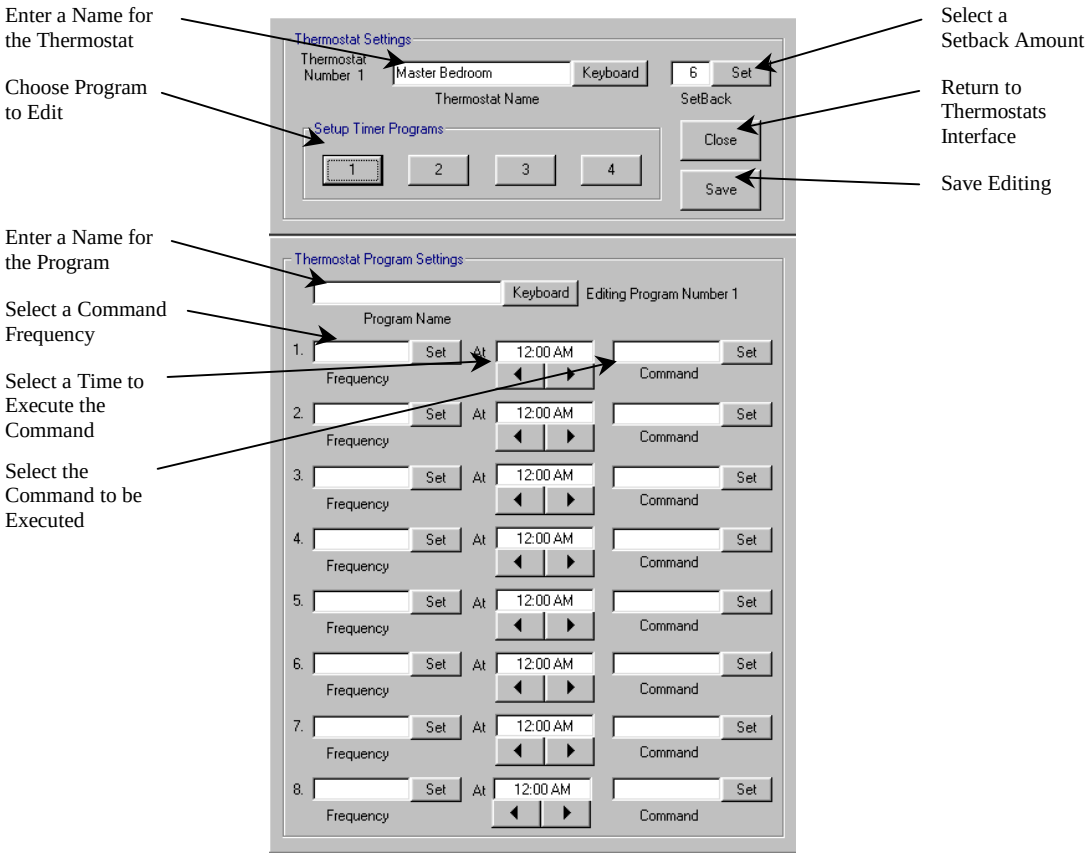


Image 40: Editing a Thermostat

Groups

Four Group buttons appear along the top of the main **Thermostats Interface**. Group 1 contains Thermostats 1 thru 3, Group 2 contains Thermostats 4 – 6, Group 3 contains Thermostats 7 – 9, and Group 4 contains Thermostats 10 - 12. This provides a total of 12 thermostats **iTouch** can control. For information on customizing the name appearing on the Group buttons see the ***Setup Guide*** found earlier in this manual.

Temperature Sensors

The Temperature Sensors display is located in the upper right hand corner of the **Thermostats Interface.** For information on customizing the name of each Temperature Sensors see the ***Setup Guide*** found earlier in this manual.

Thermostat Log File

The Thermostat Log File keeps a detailed account of thermostat activities.

Wall Display Unit Thermostat Control

As seen in the image below, each wall display unit is made up of an LCD Display, Set Point Up or Down buttons, a Mode button, and a Fan button.

LCD Display

The LCD Display normally shows the current temperature at the location of the thermostat as read by the built-in temperature sensor (not the Set Point). Whenever any buttons are pushed on the Wall Display Unit, the LCD Display will change to show that function's current status. The LCD Display will stay in the new function's mode until 3 seconds have passed with no additional activity. At that time the LCD Display will change back to show the current temperature.

Decimal Point

A Decimal Point will appear in the center of the LCD Display when the Fan is On (as opposed to the normal setting which would be Auto).

Flashing

A flashing display indicates that the Setback feature has been enabled. Note that Setbacks can only be turned on and off from the **iTouch** touch screen and cannot be controlled from the actual thermostats themselves.

Set Point Up or Down

The Set Point Up and Down buttons control the Set Point temperature (the temperature desired in the room). Remember, the LCD Display typically shows the actual room temperature. Pressing the Up or Down button once will cause the LCD Display to show the current Set Point temperature. Pushing the button again (before the display switches back to the current temperature) will increase or decrease the Set Point value by one degree.

Mode

The Mode button toggles the thermostat between Off, Heating, Cooling, and Auto Change. When in Auto Change Mode, the thermostat will automatically switch from heat to cool in order to maintain the Set Point temperature. Pressing the Mode button once will cause the LCD Display to change and show the current Mode. Pressing the Mode button again while the current Mode is being displayed will cause the Mode and LCD Display to change to the next Mode.

Fan

Pressing the Fan button once will turn the Fan On (as indicated by the Center Decimal Point on the LCD Display), which causes the Fan to run continuously. Pressing the Fan button again will return the Fan to Auto, which causes the Fan to run automatically during HVAC activity.

Image 41: Wall Display Unit

Thermostat Calibration

Thermostat calibration should be utilized when the temperature displayed at the Wall Display Unit does not match the actual room temperature. To calibrate a thermostat:

1. From the Wall Display Unit enter Calibration Mode by FIRST pressing and holding the "MODE" button and the simultaneously pressing the "FAN" button until "CO" appears in the LCD display. Release the buttons at which time the LCD display will show the current Calibration Offset, which is typically 0 but could range from 7 to –7.
2. Adjust the Calibration Offset in the proper direction by using the up and down arrows. For example, if the Wall Display Unit shows 70 degrees but should read 72 degrees adjust the Calibration Offset up 2 degrees. If the starting point was 0 the Calibration Offset will now read 2. However, if the starting point was 3 for example, the new Calibration Offset will be 5.
3. After 20 seconds the Wall Display Unit will automatically go out of Calibration Mode. The new Calibration Offset will be calculated and displayed on the next temperature update cycle. It may be up to 30 seconds before the temperature change takes effect.
4. In the event that there is difficulty getting the calibration to "stick" simply pull the face off of the thermostat, wait a few seconds, put the face back on, and begin the calibration procedure again.

Security

Pressing the Security button grants access to the detailed **Security Interface.** The **Security Interface** allows control and monitoring of the home Security System.

Arm System to Stay: Arms the system without arming internal motion detectors.
Arm System to Leave: Arms the system with motion detectors.
Chime: Toggles between Chime On and Chime Off (the chime indicates when contacts have been broken - i.e. "beep, beep" when a door is opened).
Disarm System: In order to disarm the system the security code must first be entered using the on-screen Security System Keypad and then Disarm System must be pressed.
Security System Keypad: Used for disarming system along with the Disarm System button as explained above.
Security System Status: Gives current status information.
Security Zone Status: Shows all security system zones and their current state – Green = Contact Closed. Red = Contact Broken.
Security System Log: Tracks security system activity for the day.
Download Log: Downloads recent activity from the security system to the **iTouch** Security System Log.

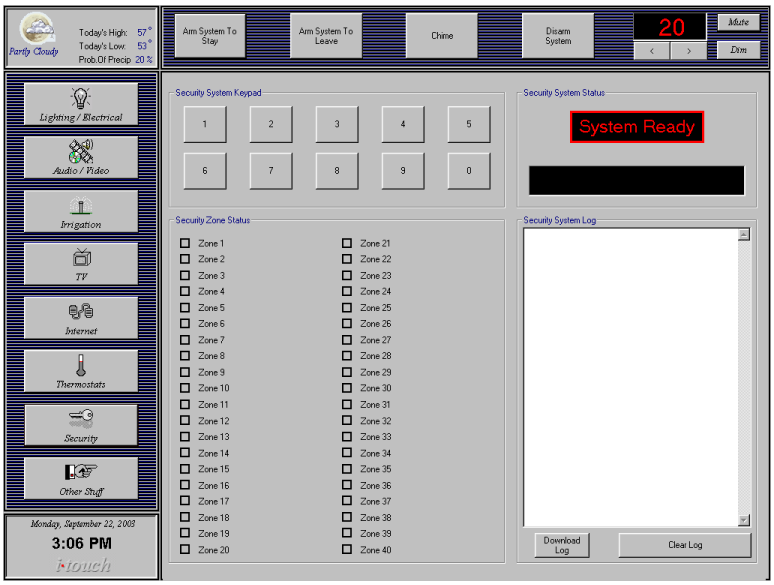


Image 42: Security Interface

Other Stuff

Pressing the Other Stuff button grants access to the following items: Forecast, Calendar, and Setup.

Forecast

Pressing this button displays the extended forecast as seen below. The extended Forecast can also be immediately accesses at any time by pressing anywhere within the daily forecast found in the upper left corner of the screen.

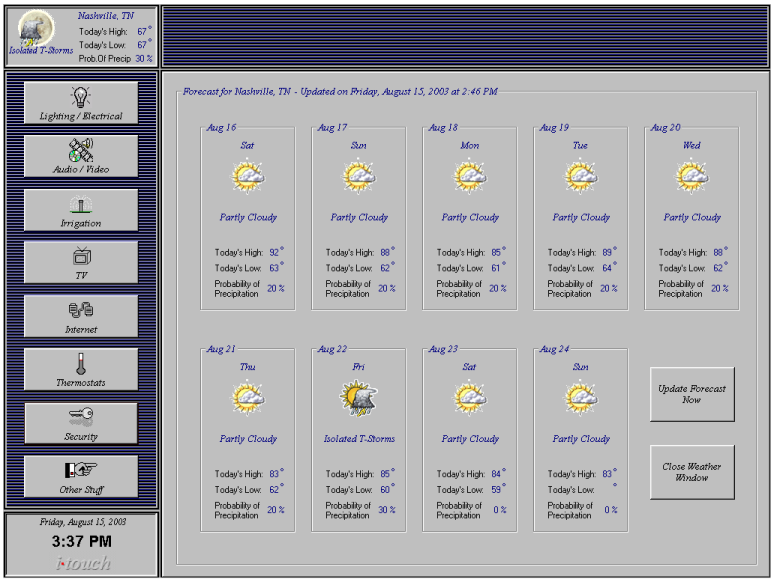


Image 43: Extended Forecast

Calendar

The **iTouch** calendar is a convenient place to store family activity information.

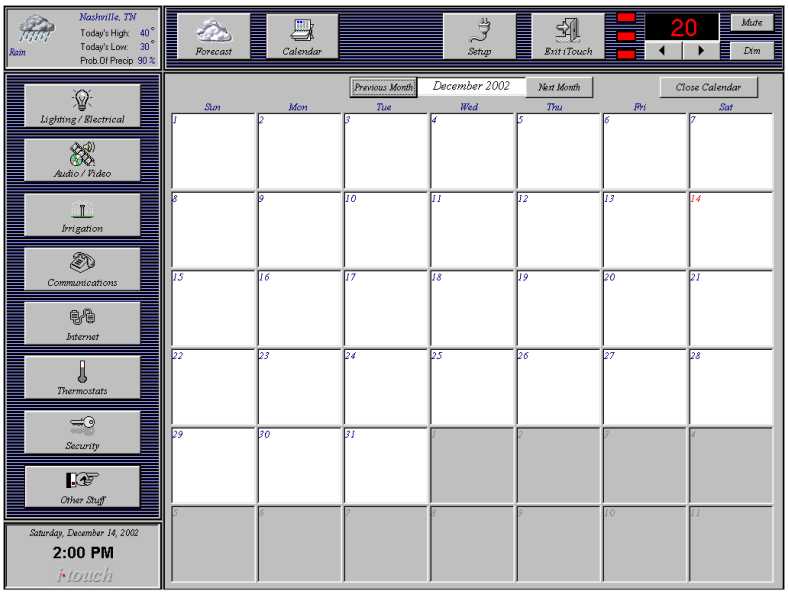


Image 44: Calendar

To store information, touch the desired date one time. This will open a box that allows specific information to be added to the calendar. Use the virtual keyboard to make additions.

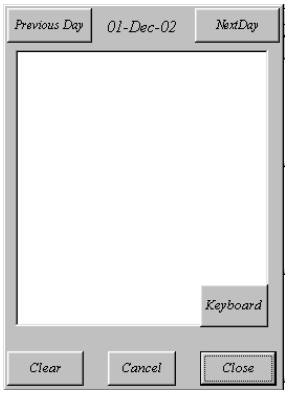


Image 45: Calendar Addition Text Box

Setup

For detailed information see the ***Setup Guide*** found earlier in this manual.

Remote System Control

This section addresses the capabilities of controlling **iTouch** from any web-enabled computer inside our outside of the home. Of course, there is no limitation to the distance traveled from **iTouch**. As long as there is a web-enabled computer nearby, the system can be accessed and operated.

It is possible to log directly onto **iTouch** from any web-enabled computer at any time as long as the **iTouch** system is on and the Internet connection to the system is functioning properly. To access the **iTouch** system from any web-enabled computer in the world:

1. Go to www.itouch.ws and select the "Owner Section" link.
2. Enter the appropriate User Name and Password when prompted. These should have been assigned by the **iTouch** installer and provided by either the installer or authorized distributor.
3. Select the My iTouch link to control the remote system. Note that there may be a prompt to download an ActiveX control. This control MUST be downloaded for remote system control to function.