

Reference Manual



AudioTron™

Digital Music Player for Home Networks

Notices

AudioTron Reference Manual, Version 3.0; May 2002

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Important Safety Information

Your Turtle Beach™ AudioTron is designed and tested to meet the latest standards for safety of digital music technology equipment. However, to ensure safe use of this product, it is important that the safety instructions marked on the product and in the documentation are followed. Always follow these instructions to help guard against personal injury and damage to your product:

- Read and follow all instructions marked on the product and in the documentation before you operate your system. Retain all safety and operating instructions for future use. Do not use this product near water or a heat source such as a radiator. Set up the system on a stable work surface. The product should be operated only from the type of power source indicated on the rating label.
- Openings in the product case are provided for ventilation. Do not block or cover these openings. Make sure you provide adequate space, at least 6 inches (15 cm), around the system for ventilation when you set up your work area. Never insert objects of any kind into the ventilation openings.
- This product is equipped with a three-conductor power cord to make sure that the product is properly grounded when in use. The plug on this cord fits only into a grounding-type outlet. This is a safety feature. If you are unable to insert the plug into an outlet, contact an electrician to install the appropriate outlet. If you use an extension cord with this product, make sure that the total ampere rating on the products plugged into the extension cord does not exceed the extension cord ampere rating. Do not walk on the power cord or allow anything to rest on it.
- Do not spill anything on the product. The best way to avoid spills is to avoid eating and drinking near the product. To avoid electrical shock, always unplug all cables from product before cleaning the product.
- When the product is turned off, a small amount of electrical current still flows through it. The power cord should be unplugged from the wall outlet when the device is not used for extended periods of time.
- This equipment contains no user serviceable parts. Please refer all servicing to trained, qualified service personnel.
- Unplug the product from the wall outlet and refer servicing to qualified personnel if: (1.) The power cord or plug is damaged. (2.) Liquid has been spilled into the product. (3.) The product does not operate properly when the operating instructions are followed. (4.) The product was dropped or the cabinet is damaged. (5.) The product performance changes.

Caution

- Do not use this product in areas classified as hazardous locations. Such areas include patient care areas of medical and dental facilities, oxygen-laden environments, or industrial facilities.
- To reduce the risk of fire, use only No. 26 AWG or larger telecommunications line cord.
- Replace fuse only with a 5 x 20mm Slo-Blo® UL/CSA Cartridge Type Fuse matching the original equipment specifications.

Contacting Turtle Beach

AudioTron is a product of:	Voyetra Turtle Beach, Inc.	5 Odell Plaza Yonkers, NY 10701 USA
Technical Support:	Tel: (914) 966-2150	Fax: (914) 966-1093
Main:	Tel: (914) 966-0600	Fax: (914) 966-1102
Web Sites:	www.turtle-beach.com	

Technical Support

➡ *If you experience trouble with the operation of AudioTron, first look in the AudioTron Reference Manual or visit our on-line Knowledge Base.*

AudioTron User group

Turtle Beach monitors and maintains user groups which can be found by following the "Users Forum and Archives" link at <http://www.turtle-beach.com/site/support/forums.asp>. Here AudioTron customers discuss how they use their AudioTrons, request feature updates, and help each other with configurations.

Web-based technical support

The Turtle Beach web site provides AudioTron firmware updates, Frequently Asked Questions (FAQ) and a comprehensive Knowledge Base that includes the latest product information and troubleshooting tips.

AudioTron FAQ and Knowledge Base: The Knowledge Base is in the Support area of our web site. Go to the Turtle Beach web site (www.turtle-beach.com) and click on "Support", then "Knowledge Base". Under the "A" section, click on "AudioTron". This will bring up the list of articles.

AudioTron Firmware & Software Updates: Go to the Turtle Beach web site (www.turtle-beach.com) and click on "Support", then "FTP Files". Under the "A" section, click on AudioTron. This will bring up the list of files available for download (including firmware updates and other support files). Note that there is an icon at the top of the product page that lets you switch between the Knowledge Base (which is where you find the articles) and the FTP site (which is where you can download files).

Other Technical Support

➡ *Please include your Product ID, firmware version number and AudioTron Serial number in all correspondence with Technical Support. **Note that all Technical Support correspondence is conducted in English.***

If you can't solve the problem by visiting our web site, contact Turtle Beach Technical Support as follows:

E-mail Tech Support: support@turtle-beach.com. Please allow at least 2-3 business days for a response.

Fax Tech Support: (914) 966-1093 Att: Tech Support. Fax a description of your problem to this number.

Phone Tech Support: (914) 966-2150 M-F, 9 a.m. to 5 p.m. EST (except public holidays.) Please note that all calls will be answered on a first-come, first-served basis. Because we cannot guarantee the length of time you will be on hold, we highly recommend you only use this option as a last resort. Times are subject to change without notice.

➡ *Because networks can be set up in so many different ways, Turtle Beach technical support cannot provide assistance on network troubleshooting. Please contact the manufacturer of your network hardware for assistance on getting the network running per the requirements in this manual.*

Warranty and End User License

Hardware Warranty

Voyetra Turtle Beach, Inc. ("VTB") warrants to the original end-user purchaser ("Purchaser") that the Turtle Beach AudioTron ("Product") will be free of defects in materials and workmanship for a period of one (1) year from the date of purchase by Purchaser ("Warranty Period"). If a defect should occur during the Warranty Period, Purchaser must obtain a Return Merchandise Authorization ("RMA") from VTB. Purchaser will be responsible for all costs incurred in returning the defective Product to and from an authorized VTB service center, or to the repair facility located at VTB's corporate headquarters. The RMA number must be clearly indicated on the outside of the package. Packages without an RMA number may be refused by VTB or its representatives and returned to Sender. The Product must be returned in the original packaging. A copy of the dated proof of purchase must be included with the defective Product.

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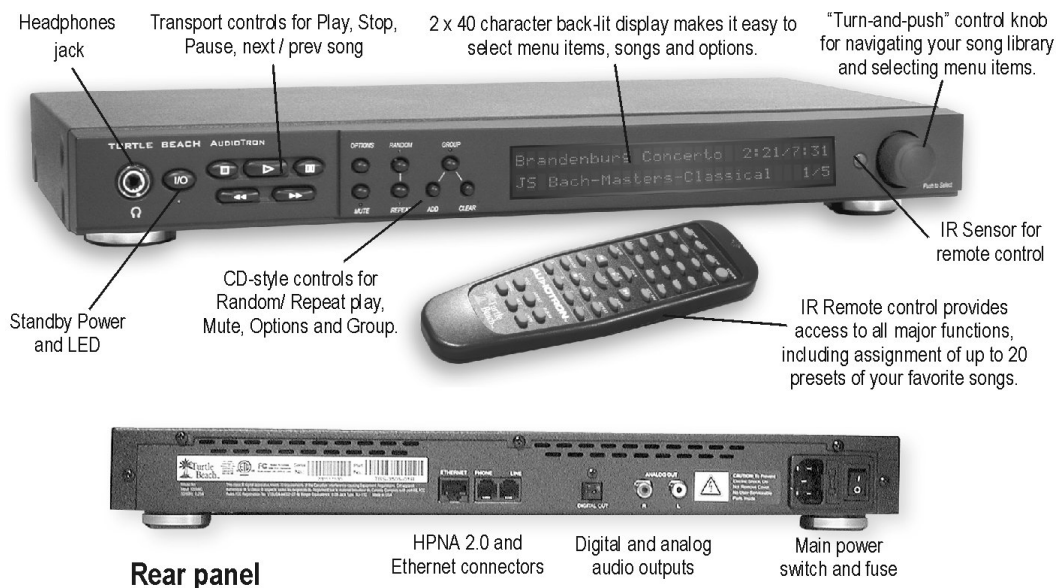
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AudioTron Controls

AudioTron's main controls are illustrated below. For details on the Front Panel, Rear Panel and Remote Control functions, see the relevant sections in this manual.



AudioTron front and rear panels with Remote Control

Turning on AudioTron's Power

AudioTron has two power switches:

The **rear panel power switch** turns on the main AC power to the unit.

The **front panel Standby button** places AudioTron in a "sleep" state whereby the main power is still on, but the unit is in a "partial shutdown" mode that retains its temporary settings.

To Power-on AudioTron...

1. Insert the AC cable into AudioTron's rear panel AC receptacle. Plug the other end of the cable into an AC outlet.
2. Turn on the rear panel AC switch. Wait a few seconds, then press the front panel Standby button.
3. If AudioTron is properly connected to the network, it will search the network for PC hosts with song files. After finding the PC hosts, it scans for songs and catalogs the song names in its internal memory so they can be quickly accessed.
4. Once AudioTron is powered on, the unit should be turned on and off with the Standby button. This bypasses the network search process initiated by turning on the power with the rear panel switch.



If you will not be using AudioTron for an extended period of time, the AC power switch on the rear panel should be turned off.

If AudioTron won't power on

- ✓ Check that the rear panel power switch is on.
- ✓ Be sure to press and hold the Standby button for a few seconds.
- ✓ Check that the power cord is seated properly in AudioTron's rear panel receptacle and in the AC wall outlet.

- ✓ Check for power in the AC outlet power by installing another known working electrical appliance (e.g. a lamp) into the same outlet to see if it operates.
- ✓ Check AudioTron's fuse (see the section "**Rear Panel Reference**")

Power-On Messages

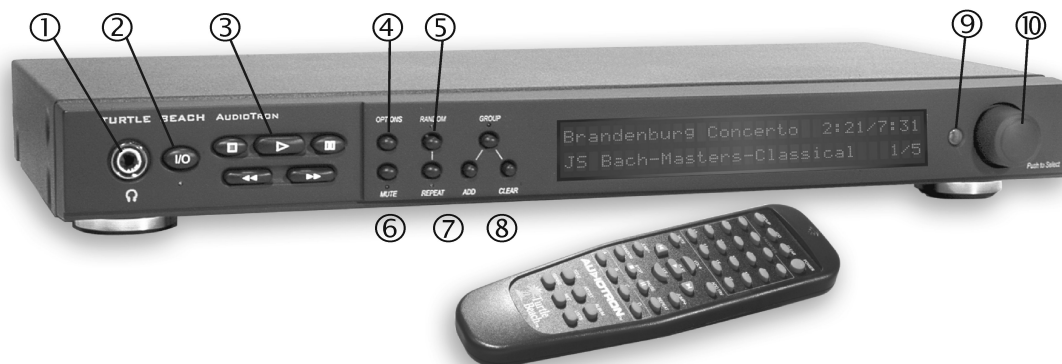
One or more of the following messages may appear while AudioTron is powering on:

Version x.x – Enet DHCP	Indicates the firmware version number and the type of network connection detected. For details on how to upgrade the firmware version, see the Reference Manual section called " Updating AudioTron's Firmware ". If you connected an Ethernet cable and AudioTron's display indicates HPNA, check the network cable connection to AudioTron and check the network for proper operation.
Connecting to TurtleRadio	Indicates that AudioTron is searching for an Internet connection to download radio station URL locations from the TurtleRadio web site. The internet radio feature is disabled by default and may be enabled from the AudioTron web server " TurtleRadio " page.
Searching for Hosts – xx% Complete	Indicates that AudioTron has found the network connection and is searching for PCs on the network.
Searching Host x of x	Indicates the number of PCs detected on the network.
Searching for Music Found xxxx Songs XXX Stations	Indicates the number of songs found on the PCs in the network. After the song search is completed, the main menu is displayed and AudioTron is ready to play music. Internet Radio Stations are displayed after the number of local songs found.
Waiting for network: xx secs	<i>(DHCP Mode Only)</i> Indicates that AudioTron is trying to connect to the network. If a network connection can't be established after 120 seconds, AudioTron stops searching and displays "No Hosts Found" followed by "No Song Titles Found". Use the Setup Utility to help troubleshoot this problem.
No Song Titles Found	Indicates that no songs were found on the host, or that no host was found. Use the Setup Utility to help troubleshoot this problem, or check for the proper directory names and shares, as described in the Reference Manual .
No Hosts Found	Indicates that no PCs were found on the network. Reconnect the network cable into AudioTron's rear panel to make sure it "clicks" when inserted, or try another network cable. Use the Setup Utility to help troubleshoot this problem.

"Re-setting" AudioTron

AudioTron may be "reset" by turning the rear panel power switch off and on, waiting a few seconds, then pressing the Standby button. This would be necessary, for example, if AudioTron is behaving erratically, or if you have loaded new firmware.

Front Panel Controls



① Headphone Jack	Drives headphones. Volume is set with the control knob while a song is playing. When headphones are connected, the rear panel analog outputs will be muted. The digital audio output is not affected.
② Standby button	After turning on the AC power with the rear panel switch, the front panel Standby button is used for turning the unit on and off. The rear panel AC switch shuts down the entire unit. Standby shuts down only the display and certain internal functions, with power maintained to the memory and processor. The red light under the Standby button indicates that the rear panel AC Power switch is "on" and the unit is in "Standby Mode". The red light flashes when the remote control is used, indicating that the IR signal was received. To reset AudioTron – Turn the back panel AC power switch off, then on. Wait a few seconds and press the Standby button to turn on the unit. This will initiate a complete start-up sequence where the unit searches for network hosts, songs, etc. To "soft" reset AudioTron – Press the Standby button off, then on, to reset the audio outputs if there is no sound on the analog line and headphone outputs.
③ Transport Buttons	Play – Starts playback of the currently selected Song or Playlist. Stop – Stops playback of the current Song or Playlist. Pause - Pauses playback if a Song is playing and resumes playback if a song is Paused. Next >> Previous << - When a song is playing, these buttons select the next/previous song in the Play Queue. If clicked within the first 5 seconds of the currently playing song, AudioTron will skip back to the next (or previous) song. If the Previous << button is clicked after the first 5 seconds of the currently playing song, AudioTron will return to the beginning of that same song. When these buttons are clicked in the Select menu, the display selection will skip to the beginning of the next/prev alphabetical category in the list, making it easier to navigate through long lists.
④ Options Button	Activates "Options Mode". See the section entitled "Options Menu" for details.
⑤ Repeat Button	Plays songs continuously when lit.
⑥ Mute Button	Mutes the analog and digital audio outputs when lit.
⑦ Random Button	Plays songs in random order when lit.
⑧ Group Buttons	Group – When lit, activates Group Edit mode for deleting single songs in the Group List with the Clear Button. See the section entitled "Using Group Mode" for details. Add - Adds the currently playing or selected song, album, list, etc. to the Group List. Clear – Deletes all songs in the Group List when the Group Button is not lit and a song is not playing. Deletes individual songs in the Group List when the Group Button is lit.
⑨ Infrared (IR) sensor	The infrared (IR) sensor receives commands from the remote control. The IR sensor is located next to the control knob, on the front of the unit.
⑩ Control Knob	The operation of the control knob depends on the context in which it is used. Functions are described in the various sections of this manual. While a song is playing, turning the knob adjusts the playback volume. Pressing the knob activates Song Position mode, whereby turning the knob changes the playback position (e.g. FF or Rewind). The default setting for volume and song position can be set in the Web Server "Settings" tab. In certain menu operations, turning and pressing the knob initiates a selection.

Setting Options from the Front Panel

The **Options** button activates the Options Menu display. Turn the control knob to scroll through the available menu items and press the knob to select. Not all of the options are accessible from the front panel display and instead are accessed via the web server. See the web server “**Settings**” section for details.

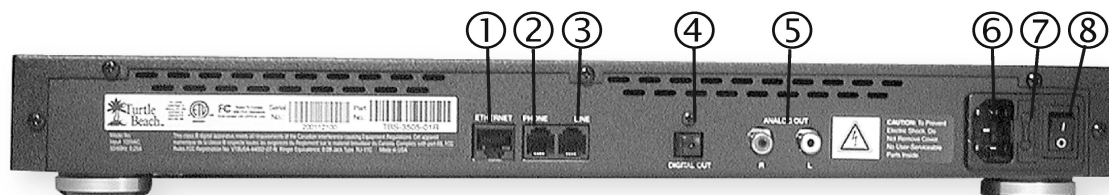
The AudioTron Web Server can be used to lock the display options menu so that options cannot be changed from the front panel. This is useful, for example, if AudioTron is being used in a public place where you do not want anyone to change the options from the front panel.

NOTE: Any change made to an option listed with an **R** will not take effect until AudioTron is re-booted:

Check for New Music Files?	Checks for any new music files stored on PC music server (Host PC). Does not search for new host PCs.
Check for New Internet Stations?	Checks for any new radio stations added to the TurtleRadio site. See TurtleRadio section for details.
Set Clock Options	Allows you to configure the clock time and alarm functions
Bass Boost (default = 0)	Activates the Bass Boost control. Turn the knob to set the level in 1dB increments. Bass boost does not affect the S/PDIF digital output.
Treble Boost (default = 0)	Activates the Treble Boost control. Turn the knob to set the level in 1dB increments. Treble boost does not affect the S/PDIF digital output.
Set LED intensity (default = 100%)	Dims the LED intensity from 10% (lowest intensity) to 100% (maximum intensity) in increments of 10%. Note that this does not affect the LCD back-light intensity.
Display Network History (press Options button to exit)	Displays a series of character strings that indicate what happened when AudioTron logged on to the network. The display strings include: Local IP Address = x.x.x.x – The IP address that AudioTron is currently using. If static IP addressing is configured, this setting should be the same as the static version. If DHCP is configured, then this is the address that was assigned by the DHCP server. AudioTron Name = Atronxxxxxx – This is the name by which the AudioTron can be found on your network. Local MAC address = x:x:x:x:x:x – The local MAC (ethernet) address for AudioTron. Local Net Mask = x.x.x.x – The net mask that AudioTron is currently using. If static IP addressing is configured, this setting should be the same as the static version. If DHCP is configured, then this is the mask that was assigned by the DHCP server. Local Gateway = x.x.x.x – The gateway that AudioTron is currently using. If DHCP is configured, then this is the gateway that was assigned by the DHCP server. Local DNS server = x.x.x.x – This is the Domain Name Server that the AudioTron is using. If DHCP is configured, then this is the DNS that was assigned by the DHCP server. Initial Search at x days x hrs x mins – Indicates that the first search of the network occurred at this amount of time since AudioTron was booted. Found TurtleRadio station server – Indicates that AudioTron was able to communicate with the TurtleRadio server. Found xxx stations – Indicates how many new radio stations were found. Host [hostname] found at IP x:x:x:x – Indicates that the host was found at the indicated IP address. Update Search at x days x hrs x mins – Indicates when the last search for new music occurred. Share [sharename] has xx new songs – Indicates the number of new songs found on the indicated share. [Sharename] - Share Access Denied – Indicates that access to this share was denied because the share password was wrong. [Sharename] – Error accessing share – Indicates that there was a non-password related error accessing this share. [Hostname] – Access to host denied – Indicates that the NT username and password are incorrect. [Hostname] – Error accessing host – Indicates that there was a non-password related error accessing this host No Name for host at IP x.x.x.x – Indicates that no name was found for a host found at

		that IP address, therefore TCP/IP was installed but File Sharing was not installed or not bound to TCP/IP. Using TOC file for Share xxxxx – Indicates that there is a “Table of Contents” file that the AudioTron is using to determine the contents of a network share.
R	Configure DHCP (default = <i>Enabled</i>)	Enable – For connecting AudioTron to a network with a DHCP server so that AudioTron will automatically accept a valid IP address from the DHCP server PC. Disable – For configuring AudioTron with a static IP address as described in the “Set IP Address” option (see below). NOTE: If DHCP is Enabled, the settings in Select Network Interface , Set IP Address , Configure Subnet Mask and Configure IP Gateway will be configured automatically. Any manually added settings in these menus will be ignored.
R	Select Network Interface	Ethernet – For connecting AudioTron to a 10BaseT-compatible Ethernet network. Phone Line – For connecting AudioTron to an HPNA 2.0 network.
R	Configure IP Address (default = <i>192.168.0.10</i>)	If DHCP is disabled, lets you assign an IP address to AudioTron. A typical IP address is 192.168.0.xxx where the xxx setting ranges from 1 – 254 as determined by the Subnet mask (a “Class C” network IP address).
R	Configure IP Subnet Mask (default = <i>255.255.255.0</i>)	If DHCP is disabled, lets you enter an IP Subnet Mask that should match the one on your network. A typical subnet mask setting for a Class C network is 255.255.255.xxx , where the xxx setting ranges from 0 – 252 and sets the valid starting point for an IP address in the network. (e.g. 0 signifies a valid IP address range of 1 – 254.)
R	Configure IP Gateway (default = <i>192.168.0.1</i>)	If DHCP is Disabled, sets the IP address of the network gateway (your host PC). This must match the setting on your host PC.
R	Restore Factory Defaults	Resets AudioTron to its original factory default settings and discards all user-customized changes. Re-start AudioTron for the default settings to take effect: Turn the rear panel power switch off and back on. Wait a few seconds and press the front panel Standby button. Once the start up procedure is completed, AudioTron will be operating with the original factory default settings.
R	Update Firmware	Updates the internal software (“firmware”) from a file on the host PC. See the section entitled “Updating AudioTron’s Firmware” for details.
	Button Test Diag	A diagnostic menu that is used for testing the operation of front panel buttons, control knob and remote control.

Rear Panel Connectors



① ETHERNET	Ethernet Network Connector - Use the included Category 5 Ethernet cable to connect this jack to a 10BaseT Ethernet network hub or switch. AudioTron will also work with a dual speed 10/100 hub, but will not work with a 100baseTX-only hub or switch.
② PHONE	When AudioTron is connected to an HPNA phone line network, this jack may be used to connect a telephone or to cascade a second AudioTron via the HPNA connection.
③ LINE	HPNA Network Connector – Connect the included telephone cable to this jack when using AudioTron on an HPNA home phone line network.
④ DIGITAL OUT	S/PDIF optical digital audio output - Connect to powered speakers or stereo receiver with an optical digital input. Connect with an optical Toslink cable (not included).
⑤ ANALOG OUT	RCA Analog Line Outputs (L/R) - Connect to powered speakers or stereo receiver with RCA line input jacks.
⑥ AC Power Connector	Insert the female end of the included three-pin IEC power cord into this receptacle.
⑦ AC Fuse	Receptacle for a 250mA Slo-Blo 250V mini-fuse. To Replace the fuse: Remove the electrical cord from the rear panel receptacle. Take a small flat-blade screwdriver and insert into notch. Gently pry out the fuse holder cover with the screwdriver. Take note of how the plastic was aligned in the holder. Take out the old fuse and replace with a new mini-fuse of the exact same type and rating (5 x 20 mm, 250mA or 1/4 Amp, 250V Slo-Blo® UL/CSA cartridge type). Put the fuse in the plastic holder and press the holder back into place on the AudioTron rear panel. Be sure to re-insert the holder in the same way it was originally installed.
⑧ AC Power Switch	Use this switch to power up AudioTron for the first time, or to turn off all power to AudioTron (this should only be necessary when you want to completely disconnect the unit or you need to perform a complete 'reset'). Once AudioTron is powered on, the rear panel power switch should be left on and the unit should be turned on and off with the Standby button. Turning AudioTron on and off with the Standby button avoids the network search process initiated by the "power on" sequence and retains AudioTron's temporary settings, so it's ready to play music with your custom configuration settings. If AudioTron is acting erratically, or if you want to rescan the network, "reset" the unit by turning the rear panel power switch off and on, wait a few seconds, then pressing the Standby button.

Remote Control

As with the buttons on the AudioTron front panel, most of the remote control's buttons activate a single function, while some serve multiple purposes depending on the active display.



The remote control functions may be checked by using the Options "Button Test Diagnostic". See the Options Menu section for details.

Buttons that function similarly to the front panel controls

GROUP, ADD, CLEAR (Group Mode controls)	Equivalent to the front panel Group, Add and Clear buttons.
POWER	Equivalent to the front panel Standby button.
MUTE	Equivalent to the front panel Mute button. Silences the audio playback.
PLAY, STOP, PAUSE	Equivalent to the front panel transport buttons.
 	Equivalent to the front panel previous/next track buttons. When in Select modes, these buttons also scroll through lists in the same way as turning the Control Knob. The scrolling speed will increase as the buttons are held down longer.
VOL+ (volume up), VOL- (volume down)	Equivalent to the front panel Control Knob when in Play Mode (Volume Control).
RANDOM / REPEAT	Equivalent to the front panel Random and Repeat buttons.

Buttons not available on the front panel

FAVORITES	The 16 "Favorites" buttons work in conjunction with the Add FAV button to quickly activate favorite songs and lists by pressing one of the FAVORITES buttons. See the section Using "Favorites" Mode for details.
ADD FAV (Add Favorite)	This button is only active in the select screen (Select Mode). It prompts the user to select a favorite slot and saves the current selection type and entry into the Favorites slot you choose. See the section Using "Favorites" Mode for details.
JUMP + (jump forward) JUMP- (jump back)	When selecting from the menu, jumps forward or back to the next entry that does not begin with the same character (case insensitive) as the current Entry. Makes it easier to navigate through long lists of songs. While a song is playing, selects song position (like fast forward and rewind.)
PRESETS	These are 4 additional favorites buttons grouped into a separate area for quicker access. Use these buttons for assigning "favorites" you intend to use often.
TITLE, ARTIST, ALBUM, GENRE, LISTS	Equivalent to the categories in the main menu for selecting lists.
NET (Internet)	Activates Internet radio menu.



AudioTron Remote Control

Assigning “Favorites” to the Remote Control

The “Favorites” feature lets you assign a song, album, artist, genre, Internet radio station or playlist to the Favorites Buttons on the remote control so you can instantly play them with a push of a button.

The remote control includes a set of 20 user programmable buttons, grouped as 16 “FAVORITES” buttons (labeled 1 – 16) and 4 “PRESETS” buttons (labeled A, B, C and D). When one of these buttons is pressed, the current playing song (if any) is stopped and the songs associated with the button will be loaded into the Play Queue.

To assign the Favorites and Presets buttons on the Remote Control

1. Turn the knob to highlight **Title, Artist, Album, Genre, Net or Lists** in the display menu (or press the corresponding button on remote control). For example, to assign an album, select Album.

Title	Artist	<u>Album</u>	Genre	Net	Lists
Select by Album					

2. Press the knob (or **Play**) and turn the knob to scroll album names.

Select by Album
Sting - Brand New Day

3. When the desired album is displayed, press the “**Add FAV**” button on the remote control. The display will prompt for the number of the Favorites button you wish to use.

Save Album: Sting - Brand New Day
As Favorite #?

4. Press one of the 16 “Favorites” buttons or one of the 4 “Preset” buttons on the remote control. For example, if you press button #1, the # sign in the display will change to a “1”, indicating the number of the button pressed. From this point on, pressing Favorites Button 1 will load and play this album.
5. To re-assign a song or list to a button that has been assigned, follow the same process to overwrite the previous contents.



*The Favorites buttons can also be assigned with the AudioTron web server. See the web server “**Favorites**” section for details.*

Using the “More songs like this” Feature



*The “More songs like this feature” is activated from the web server Preferences screen, accessed by selecting **Settings → Preferences** in the AudioTron web server.*

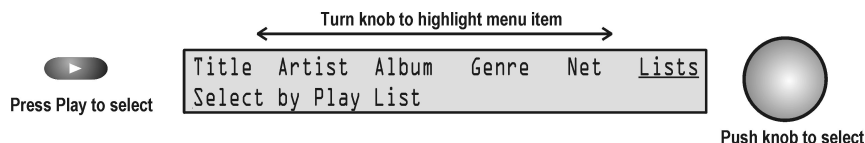
The remote control “**More songs like this**” feature lets you easily play all songs by a particular artist, genre or album while listening to your music. When this feature is enabled via the web server **Preferences** screen, the remote control ARTIST, ALBUM, or GENRE buttons no longer operate as menu selection buttons. Instead, they will clear the play queue and load all songs corresponding to the category of the current song.

For example, if you’re listening to a Jazz song and decide that you’d like to hear more Jazz songs, pressing the Genre button on the remote control will clear the Play Queue and load every Jazz song in your library. Or, if you’re listening to a song by a particular artist and want to hear only songs by that artist, pressing Artist will clear all of the songs in the Play Queue and load all songs by that artist. Or, while listening to a song from a particular album, pressing Album will clear the Play Queue and load all songs from that album.

Playing your Music Library from the AudioTron Panel

Main Menu Display

AudioTron's **Main Menu** display (shown below) lets you find songs by **Title** (individual song titles), **Artist** (creator of the song), **Album** (the name of the CD the song came from), **Genre** (type of music), and **Lists** (User-defined Playlists). The **Net** menu item lets you select Internet radio stations if AudioTron is configured for Internet radio via the web server **Settings** → **TurtleRadio** page. The stations in the **Net** category are configured at the **TurtleRadio** web site, as described in the Setup Guide section entitled "**Configuring AudioTron to play Internet Radio.**"

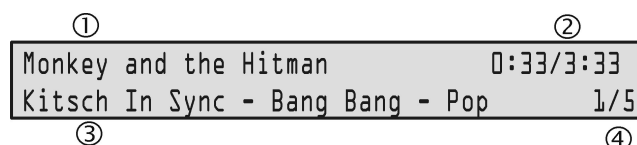


The categories Title, Artist, Album and Genre are part of the "song tag" created by AudioStation or other PC jukebox program used to transfer the song from a CD to the hard drive. When an entry from these categories is selected, AudioTron searches the music library for a song that matches the tag. If a song was entered without tag data, its file name (rather than song title) will be displayed when the Title category is selected and the file name will not appear when Artist, Album, or Genre are selected. For more information on Song Tags, see the section called "**Managing your Music Library with AudioStation**".

To select a category...

1. Turn the knob until the desired category flashes. Press the knob to select the category.
2. While making a selection, pressing STOP at any point will return to the main menu.
3. Pressing the **Play** button while a song is playing will activate the main menu so you can add more songs to the Play Queue. If no selections are made within a fixed timeout period, the song status display will return.

Song Playback Display



Pressing the **Play** button starts song playback and displays the following information:

① Song Title	The song title appears in this field. If there is no Title embedded in the music file's tags, the song's file name will be displayed.
② Play time/status	Displays how long the song has been playing and the total time of the song. If the song is not playing, the current status is displayed: PAUSED – Indicates that the Pause button has been pushed and the song is paused. Press Pause or Play to resume playback. BUFFERING xx% - Indicates that AudioTron is transferring song data from the network into its internal song buffer. MUTED - If the MUTE button is pressed, the word MUTED will flash.
③ Tags	"Tags" are data embedded in the audio files that provide information about the song (e.g. title, artist, album name, genre.) If no tags have been entered for the song, the file name for the song will be displayed. If the song tags contain more information than can be displayed at one time, the display can be set to scroll as a "marquee". See the web server " Settings - Preferences " section for information on controlling the display settings from the web server Preferences screen.
④ Play Queue Status	Displays the current song number and total number of songs in the Play Queue (e.g. the first song in an album that contains 5 songs will display as "1/5")

Song Position Display

Setting Position 3:10/6:12

To set the song position while a song is playing, press the remote control JUMP + or JUMP - buttons or press and turn the knob on the front panel. The display will indicate the song position and the song will continue to play while you move the cursor. After the cursor stops moving, the song will jump to the new position.

Note that the song position feature will show a percentage instead of the time with MP3 files encoded in VBR (Variable Bitrate) format.



*The web server **Settings** → **Preferences** screen lets you set the knob to default in the Song Position mode on power up, rather than default to the Volume function. See the Web Server section for details.*

Playback Volume Display

Gain
0 dB

Turning the knob while a song is playing or pressing the remote control volume buttons will momentarily display the volume setting. The volume control will only affect the rear panel analog outputs and headphones output. The S/PDIF digital output volume will not be affected by the volume control.

The volume setting indicates the “attenuation” of the maximum signal level. A setting of 0dB (“zero decibels”) indicates that there is no attenuation (i.e. “full volume”). Turning the knob counterclockwise will attenuate the signal by -1dB steps. The volume setting is saved when the Standby button is turned off. When turned back on, the volume will return to the saved setting.



The Volume Control should be left at the 0dB (maximum) setting unless AudioTron is used with headphones or powered speakers that do not have a volume control. For best fidelity, the volume control on your stereo system or powered speakers should be used to control the playback level.

Play Queue

Songs selected from the menu display are added to the “**Play Queue**”, which is a list of songs to be played. By navigating through the song selection menu, you can add songs to the Play Queue while listening to other songs.



Contents of the Play Queue can be viewed and edited with the AudioTron web server.

The currently playing song is at the beginning of the Play Queue. For example, if a song is playing and three songs are selected from the display menu, the Play Queue will contain four songs—the currently playing song and the three songs added to the queue. When the current song is over (or if the **Next Track** button is pressed before the song is over) the second song in the queue begins to play, followed by the third and then the fourth, until the queue is completed.

Pressing the **Random** button will cause the songs in the Play Queue to play in a random order. Pressing the **Repeat** button will cause the Play Queue list to start over after the last song has finished playing.

The Play Queue cannot be edited from the front panel and the contents are erased when the Stop button is pressed. You can, however, remove songs from the play queue from the web interface. To stop a song without erasing the Play Queue, press the **Pause** button.

Group List

A more permanent and editable play list can be created with the **Group List**. Pressing the **Add** button will add the displayed items to the end of the Group List. Selecting **<Group>** in the **Lists** menu plays the songs in the Group List. Songs may be added while a song is playing or while searching for songs in the display menu.



The Group List may also be viewed and edited via the AudioTron web server.



If you do not clear the Group before adding songs to your custom play list, the songs will be added to those already in the Group.

To clear the Group List...

1. Press **Stop** to activate the display menu.
2. To delete all of the songs from the Group List, press the **Clear** button.
3. To delete specific songs from the Group List, press the **Group** button (LED turns on), turn the knob to select the song, then press the **Clear** button to delete only the song in the display.

To add songs to the Group List...

1. To clear out the entire Group List or specific songs in the Group List, see above. Adding songs without first clearing the Group List will add the songs to those already in the list.
2. To add a song while it is playing, press the **Add** button on the front panel.
3. To add a song while searching for songs, press **Add** while the song title is on the display.
4. To add all of the songs from an album, by an artist, in a genre, or in a playlist to the Group List, press **Add** while the Album name, Artist name, Genre Name or Playlist Name is displayed.
5. To add multiple songs, repeat the steps above. For example, to add three songs from the same album to the Group List, press **Add** → scroll → **Add** → scroll → **Add**. Or to add all of the songs in the album, select **ALL** rather than the individual titles.

To play the Group List...

1. Press **Stop** to activate the menu display. Turn the knob to select **Lists** and press either the knob or the **Play** button to select.
2. Turn the knob to display **<Group>**, then press either the knob or **Play** button to load all of the Group List songs into the Play Queue. The Group List can also be edited with the web server.



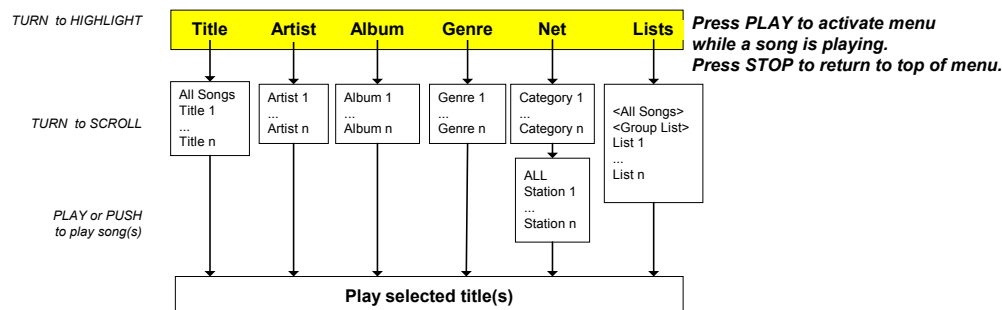
Turning off the AC power to AudioTron will delete the Group contents. Placing AudioTron in "Standby mode" will not delete the Group.

Songs vs. Items

An important concept to remember when using AudioTron is the difference between "songs" and "items" when selecting what to play. AudioTron lets you select songs by searching for titles, artists, albums, genres and playlists. When you search for and add a "title" to the Play Queue, you effectively select one "item" that adds one song to the queue. However, if for example, you select an album with 12 songs, you would have selected an item that added 12 songs to the queue. Or if you select a genre with 300 songs, you would have selected an "item" that adds 300 songs to the queue.

The point to remember is that functions, which accept songs for playback (e.g. Play Queue, Group List and Favorites buttons), can accept single songs or "items" with multiple songs. For example, to create a Favorites button that would play all of your classical music, you'd add the "Classical" genre item to the Favorites button, rather than each song individually.

Simple Menu Mode



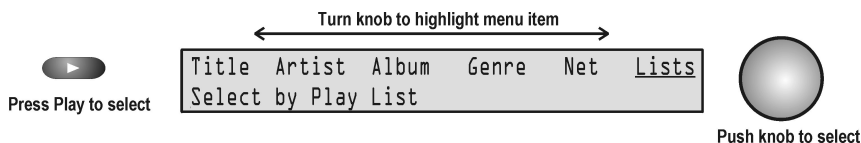
Simple Menu Tree

The AudioTron defaults to “**Simple Menu Mode**”, which lets you select songs by category and then a group within that category. For example, selecting **Album** would let you find an album by name and play all of the songs on the album. Or, selecting **Artist** would let you play all of the songs by an artist. Only the **Title** menu item lets you find and play individual songs from the music library.

The flow chart shows the “tree” structure of Simple Menu Mode. The top of the tree shows the main menu selections (**Title**, **Artist**, **Album**, **Genre**, **Net** and **Lists**) while the boxes below each menu item show the corresponding categories.

Navigating the Menu Tree

To navigate in the menu tree, begin at the top by turning and pressing the knob to select the items below the menu. Then, turn the knob to scroll the items in the sub-menu and press to select the displayed item.



For example, selecting “**Artist**” presents a sub-menu listing all of the artists in the music library. Turning the knob scrolls the artist names and pressing the knob loads all of the songs by the selected artist into the Play Queue.

To play a single song

1. Turn the knob until the **Title** menu item selection flashes. Press the knob, then turn to select a song title from the song library. (NOTE: Pressing the **Next/Prev** buttons on the front panel or the **JUMP+** and **JUMP-** buttons on the remote control will skip to the first song in the next letter of the alphabet, which provides a quick way to scroll through a large library.)
2. When the desired title is displayed, press the **Play** button or push the knob to start playback. The song will be added to the Play Queue.
3. To load the song into the Group list, press the **Add** button when the title is displayed, before pressing **Play**.

When **Play** is pressed, AudioTron will transfer a portion of the song file from the PC Host to its internal memory buffer for playback. After the buffer is adequately filled, the song will play once, then stop. The “time indicator” on the right side of the display will advance as the song plays. To play the song repeatedly, press the **Repeat** button.



If there are multiple songs with the same name in the music library, AudioTron differentiates between them by adding a number in parentheses after the name of the song (e.g., “Song” and “Song -(1)”.)

To play songs by a particular Artist

1. Turn the knob until the **Artist** menu item flashes. Press the knob, then turn to select the Artist Name. (Pressing the <</> buttons on the front panel or the **JUMP+** and **JUMP-** buttons on the remote control will skip to the first song in the next letter of the alphabet, which provides a quick way to scroll through a large library.)
2. When the desired artist is displayed, press the **Play** button or push the knob to start playback. The number of songs for the selected artist will be loaded into the Play Queue and the first song will begin to play.
3. To load the artist songs into the Group list, press the **Add** button when the artist name is displayed, before pressing **Play**.

To play songs from a particular Album

1. Turn the knob until the **Album** menu item flashes. Press the knob, then turn to select the Album name. (Pressing the <</> buttons on the front panel or the **JUMP+** and **JUMP-** buttons on the remote control will skip to the first song in the next letter of the alphabet, which provides a quick way to scroll through a large library.)
2. When the desired album is displayed, press the **Play** button or push the knob to start playback. The number of songs for the selected Album will be displayed and the entire list of songs from the Album will be loaded into the Play Queue.
3. To load the Album songs into the Group list, press the **Add** button when the album name is displayed, before pressing **Play**.

To play songs of a particular Genre

1. Turn the knob until the **Genre** menu item flashes. Press the knob, then turn to select the Genre name. To scan by letter, press the next/prev track buttons. (Pressing the <</> buttons on the front panel or the **JUMP+** and **JUMP-** buttons on the remote control will skip to the first song in the next letter of the alphabet, which provides a quick way to scroll through a large library.)
2. When the desired genre is displayed, press the **Play** button or push the knob to start playback of all the songs in the genre.
3. To load the genre songs into the Group list, press the **Add** button when the genre name is displayed, before pressing **Play**.

To play songs from a Play List

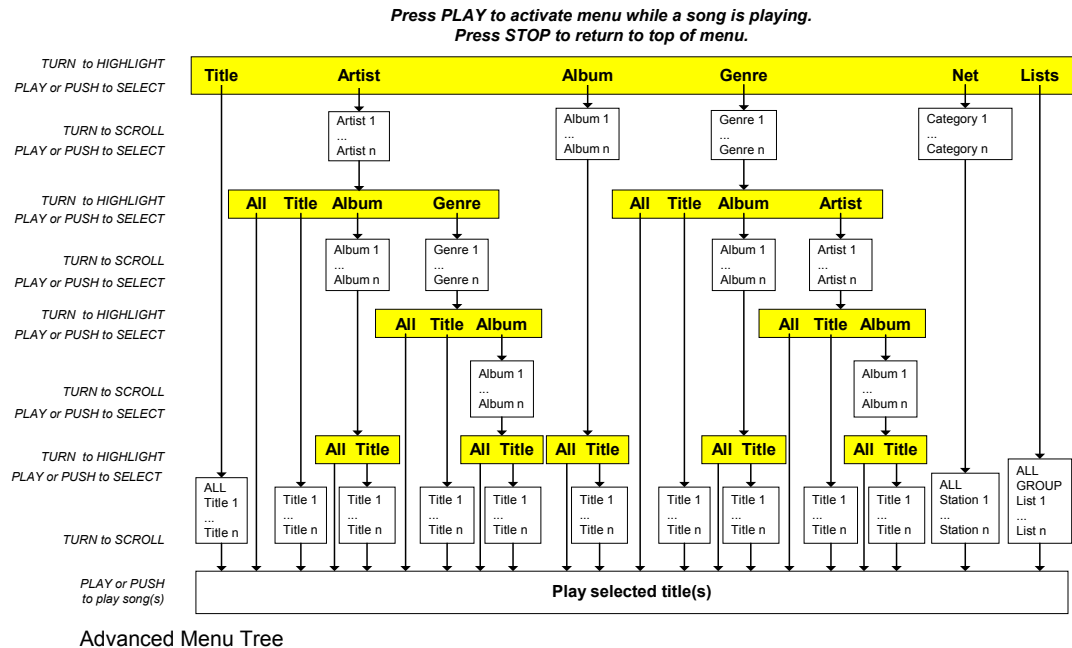
Play Lists are groups of songs created on the PC using a jukebox program such as AudioStation. For information on Playlists, see the section called “Managing your Music Library with AudioStation”.

1. Turn the knob until the **Lists** menu item flashes. Press the knob, then turn to select the List name. The first list item, <All songs> will select all of the songs in the music library. The second item, <Group> is the list created by the Group buttons. The rest of the lists are the play lists created on the PC as M3U or PLS files.
2. When you find the desired play list, press the **Play** button or push the knob to start playback of the songs in the list.

To select with the Remote Control

1. Press the menu item you'd like to select (e.g. “Genre”).
2. Press the |< and >| buttons to move through the selections, just like turning the knob. Press Jump + and Jump – to scroll to the next letter in the list.

Advanced Menu Mode



Advanced Menu Mode provides a search mechanism significantly more advanced and versatile than Simple Mode, providing detailed control over selection of songs from the music library. For example, you could find an album by name, and play a single song on that album. Or, you could find an artist by name, then all albums by that artist, then a song on one of those albums.



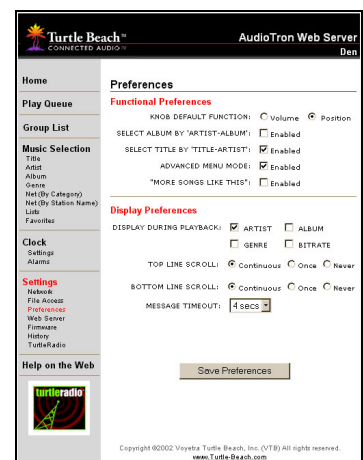
Advanced Menu Mode is enabled from the AudioTron web server **Preferences** screen.

“Filtering” Selections in the Menu Tree

The flow chart above shows the “tree” structure in Advanced Mode. The top shows the main menu selections (Title, Artist, Album, Genre, Net and Lists), while the boxes below each menu item show the categories and paths for navigating the tree. For example, selecting “Artist” presents a list of all artists, as in Simple Mode. However, once the artist is selected, a sub-menu allows the selection of **All** (all songs by the artist), **Title** (single titles by the artist), **Album** (album titles by the artist), and **Genre** (genres by the artist). Once one of these items has been selected, another sub menu appears, and so on, until the bottom of the tree is reached. This effectively “filters” the music library by the criteria chosen in each part of the menu tree so that only songs matching the selected criteria will be listed in the display.

The menu tree shows how Advanced Mode lets you find songs by following a path beginning with the main menu at the top and ending with a list of song titles “filtered” along the path to the bottom. For example, a song on an album can be found by following one of two paths: **Artist → Album → Title** or **Album → Title**. Similarly, finding a song in a particular genre by an artist could be found by **Artist → Genre → Title** or by **Genre → Artist → Title**.

Navigating the other paths through the menu tree follows a similar pattern. Therefore, by referring to the above diagram of the menu tree, the following descriptions of how to navigate through the Title and Artist trees can be extrapolated to understand the paths in the other trees.



Advanced Menu Mode is enabled in the web server **Preferences** screen.

Selecting Songs by Title

To select all songs in the music library (Method 1)

Title Artist Album Genre Net Lists
Select by Title

Turn knob to highlight **Title** in the display menu (or press **Title** on remote control.) Then press **Play** or push knob to select Title mode.

Select by Title (STOP to exit)
<All Songs>

<**All Songs**> is highlighted as the first entry in the list.
Press **Play** or push knob to select all songs.

Selected 2,572 Songs

All songs in the music library are added to the Play Queue.

To select all songs in the music library (Method 2)

Title Artist Album Genre Net **Lists**
Select by Lists

Turn knob to highlight **Lists** in the display menu (or press **Lists** on remote control.)
Press **Play** or push knob to select Title mode.

Select by List (STOP to exit)
<All Songs>

<**All Songs**> is highlighted as the first entry in the list.
Press **Play** or push knob to select all songs.

Selected 2,572 Songs

All songs in the music library are added to the Play Queue.

To select a song by Title

Title Artist Album Genre Net Lists
Select by Title

Turn knob to highlight **Title** in the menu (or press **Title** on remote control.)
Press **Play** or push knob to select songs by title.

Select by Title (STOP to exit)
Anytime at All

To scroll songs, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to play.

Selected 1 item

Selected song is added to the Play Queue.

Selecting Songs by an Artist

To select all songs by an Artist

Title **Artist** Album Genre Net Lists
Select by Artist

Turn knob to highlight **Artist** in menu (or press **Artist** on remote control.)
Press **Play** or push knob to select songs by Artist.

Select by Artist (STOP to exit)
Sting

To scroll artists, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select.

All Title Album Genre (STOP to exit)
Play All for Sting 63 songs

The number of songs by this artist is shown at the bottom right.
Press **Play** or push knob to select all songs by this artist.

Selected 63 items

All songs by this artist are added to the Play Queue.

To select a single song by an Artist

Title **Artist** Album Genre Net Lists
Select by Artist

Turn knob to highlight **Artist** in menu (or press **Artist** on remote control.)
Press **Play** or push knob to select songs by Artist.

Select by Artist (STOP to exit)
Sting

To scroll artists, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select.

All Title Album Genre (STOP to exit)
Select Title for Sting 63 songs

Turn knob to highlight **Title** (or press Title on remote control.)
Press **Play** or push knob to select a song by this artist.

Select Title for Sting
A Thousand Years

To scroll songs, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select song.

Selected 1 Items.

The selected song by this artist is added to the Play Queue.

To select all songs on an Album by an Artist

Title Artist Album Genre Net Lists
Select by Artist

Turn knob to highlight **Artist** in menu (or press **Artist** on remote control.)
Press **Play** or push knob to select songs by Artist.

Select by Artist (STOP to exit)
Sting

To scroll artists, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select artist

All Single Album Genre (STOP to exit)
Select Album for Sting 63 songs

Turn knob to highlight **Album** (or press **Album** on remote control.)
Press **Play** or push knob to select a song by searching albums by this artist.

Select Album for Sting
Brand New Day

To scroll albums, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select album.

All Title (STOP to exit)
Play All for Sting: Brand New 10 songs

All is highlighted. The number of songs on this album is shown at the bottom right (10 songs). Press **Play** or push knob to select all songs on this album.

Selected 10 items

The 10 songs on this album are added to the Play queue.

To play a song on an Album by an Artist

Title Artist Album Genre Net Lists
Select by Artist

Turn knob to highlight **Artist** in menu (or press **Artist** on remote control.)
Press **Play** or push knob to select songs by Artist.

Select by Artist (STOP to exit)
Sting

To scroll artists, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select artist.

All Title Album Genre (STOP to exit)
Select Album for Sting 63 songs

Turn knob to highlight **Album** (or press **Album** on remote control.)
Press **Play** or push knob to select a song by searching albums by this artist.

Select Album for Sting
Brand New Day

To scroll albums, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select album.

All Title (STOP to exit)
Select Title for Sting: Brand New 10 songs

Turn knob to highlight Title. Press Play or push Knob to select a song on this album.

Select Title for Sting: Brand New Day
A Thousand Years

To scroll songs on this album, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump + / Jump -** on remote control) to jump by letter. Press **Play** or push knob to select song.

Selected 1 item

Selected song on this album is added to the Play Queue.

To play all songs in a Genre by an Artist

Title Artist Album Genre Net Lists
Select by Artist

Turn knob to highlight **Artist** in menu (or press **Artist** on remote control.) Press **Play** or push knob to select songs by Artist.

Select by Artist (STOP to exit) Sting	To scroll artist names, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select.
All Title Album Genre (STOP to exit) Select Genre for Sting 63 songs	Turn knob to highlight Genre (or press Genre on remote control.) Press Play or push knob to select songs by Genre for this artist.
Select Genre for Sting Rock	To scroll genres by this artist, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select genre.
All Title Album (STOP to exit) Play All for Rock: Sting 63 songs	All Songs mode is highlighted. Press Play or push knob to select all songs in this Genre by this artist.
Selected 63 items	All songs in this genre by this artist are added to the Play queue.

To select a song in a Genre by an Artist

Title Artist Album Genre Net Lists Select by Artist	Turn knob to highlight Artist in menu (or press Artist on remote control.) Press Play or push knob to select songs by Artist.
Select by Artist (STOP to exit) Sting	To scroll artists, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select.
All Title Album Genre (STOP to exit) Select Genre for Sting 63 songs	Turn knob to highlight Genre (or press Genre on remote control.) Press Play or push knob to select songs by Genre for this artist.
Select Genre for Sting Rock	To scroll genres by this artist, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select genre.
All Title Album (STOP to exit) Select Title for Rock: Sting 63 songs	Turn knob to highlight Title (or press Title on remote control.) Press Play or push knob to select a song.
Select Title for Rock: Sting After the Rain Has Fallen	To scroll songs in this genre by this artist, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select song.
Selected 1 item	Selected song is added to the Play Queue.

To select all songs in a Genre on an Album by an Artist

Title Artist Album Genre Net Lists Select by Artist	Turn knob to highlight Artist in menu (or press Artist on remote control.) Press Play or push knob to select songs by Artist.
Select by Artist (STOP to exit) Sting	To scroll artists, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select.
All Title Album Genre (STOP to exit) Select Genre for Sting 63 songs	Turn knob to highlight Genre (or press Genre on remote control.) Press Play or push knob to select songs by Genre for this artist.
Select Genre for Sting Rock	To scroll genres by this artist, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select genre.
All Title Album (STOP to exit) Select Album for Rock: Sting 63 songs	Turn knob to highlight Album mode (or press Album on remote control.) Press Play or push knob to select an Album.
Select Album for Rock: Sting Brand New Day	To scroll albums in this genre by this artist, turn knob (or press < / > on remote control). Press << / >> (or Jump + / Jump - on remote control) to jump by letter. Press Play or push knob to select album.

All Title (STOP to exit)
Play All for Rock: Sting: Brand Ne 10 songs

All titles is highlighted.
Press **Play** or push knob to select all songs on this album.

Selected 10 items

All songs on this album are added to the Play Queue.

To select a song in a Genre on an Album by an Artist:

Title **Artist** Album Genre Net Lists
Select by Artist

Turn knob to highlight **Artist** in menu (or press **Artist** on remote control.)
Press **Play** or push knob to select songs by Artist.

Select by Artist (STOP to exit)
Sting

To scroll artists, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump +** / **Jump -** on remote control) to jump by letter. Press **Play** or push knob to select.

All Title Album **Genre** (STOP to exit)
Select Genre for Sting 63 songs

Turn knob to highlight **Genre** (or press **Genre** on remote control.)
Press **Play** or push knob to select songs by Genre for this artist.

Select Genre for Sting
Rock

To scroll genres by this artist, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump +** / **Jump -** on remote control) to jump by letter. Press **Play** or push knob to select genre.

All Title **Album** (STOP to exit)
Select Album for Rock: Sting 63 songs

Turn knob to highlight **Album** mode (or press Album on remote control.)
Press **Play** or push knob to select an Album.

Select Album for Rock: Sting
Brand New Day

To scroll albums in this genre by this artist, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump +** / **Jump -** on remote control) to jump by letter. Press **Play** or push knob to select album.

All **Title** (STOP to exit)
Select Title for Rock: Sting: Brand 10 songs

Turn knob to highlight **Title** (or press Title on remote control.)
Press **Play** or push Knob to select a song.

Select Title for Rock: Sting: Brand New Da
Big Lie Small World

To scroll songs on this album, turn knob (or press |< / >| on remote control). Press << / >> (or **Jump +** / **Jump -** on remote control) to jump by letter. Press **Play** or push knob to select song.

Selected 1 item

Selected song is added to the Play Queue.

➡ The above techniques for selecting songs can also be used to add the selections to the Group List by pressing the **Add** button when the song or item is displayed.

Controlling AudioTron with the Web Server

Web Server Overview

AudioTron's extensive list of features cannot all be controlled from the limited number of buttons on the remote and front panel. Instead, we've provided an integrated "**web server**" that can be accessed from your PC's web browser. Once your AudioTron is configured, any PC on your network can be used to access the web server by simply launching your web browser (e.g. Internet Explorer or Netscape) and entering the IP address of your AudioTron, enabling you to communicate with the AudioTron from the PC.

After you've become accustomed to AudioTron's powerful set of features, you'll appreciate the convenience of using the AudioTron web server to control your song library and AudioTron settings.

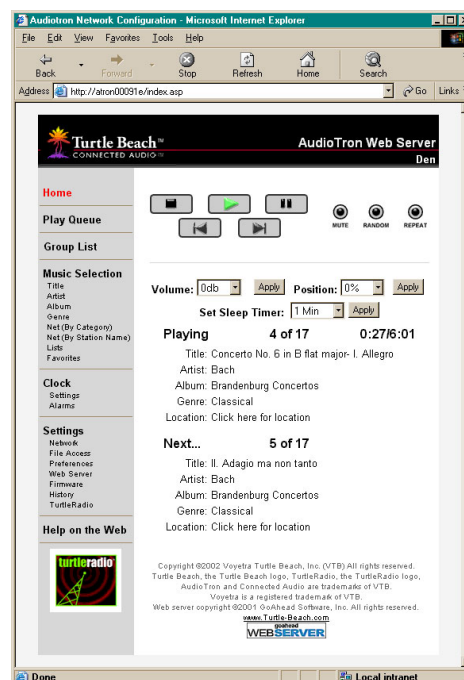
➡ *The AudioTron Web Server is incompatible with Netscape Navigator earlier than version 6.0.*

➡ *Ad blocking, cookie blocking or personal firewall programs may prevent the web server from communicating with the PC and therefore should be disabled.*

➡ *The web server also supports a "thin client" mode compatible with the smaller screen on a PocketPC device. This mode enables devices such as the Compaq iPaq to control AudioTrons from its web browser. For more information, see the section "Using PocketPC devices with the Web Server."*

To access the Web Server

1. Activate the web browser on a PC connected to the same network as AudioTron.
 2. Find the network name assigned to AudioTron by pressing the front panel **Options** button, selecting "**Network History**", and scrolling to "**AudioTron Name =**". After noting the name (e.g. Atron00096a), press the **Options** button to exit Options mode.
 3. In your PC web browser screen, enter the AudioTron name the same way you'd enter an Internet Web site URL, and then press Enter on your PC keyboard. For example, if the AudioTron name is Atron00096a, enter <http://Atron00096a>. Note that you can also use AudioTron's IP address. (e.g. <http://192.168.1.10>) or use the link created by the Setup Utility.
 4. If you attempt to access the web server Settings or Clock functions, the web browser will ask for a user name and password. Enter the default password "**admin**" for both. This password can be changed from the "**Settings Web Server**" screen and is useful if you want to prevent others from changing the AudioTron's settings without your permission.
- ➡ *The "Restore Factory Defaults" button in the web server **Firmware** screen can be used to reset the password and user name to "admin".*
5. After the username and password are entered, the browser will search for AudioTron at the address you've entered. When it finds AudioTron on the network, the AudioTron web server home screen will be displayed.



Web server running in the Windows Explorer Web browser

6. To make it easier to activate the web server from this point on, you can use the web browser's "Add to Favorites" setting to add the AudioTron address to your list of favorite URLs. Your web browser will also let you rename the "favorite" to something easier to remember, such as "AudioTron in Living Room".

Web Server Menu Selections

The gray area on the left side of the screen lists all of the web server screens. To access a screen, click the name in the menu list. The list is divided into three key sections:

- The **Music Selection Section** lets you play and access music files or Internet radio stations.
- The **Clock Section** lets you activate and set the clock/alarm features.
- The **Settings Section** lets you configure web server and AudioTron operation options.

You can also access Internet-based information by clicking on these key areas in the screen:

- Clicking on the **Turtle Beach logo** at the top of the screen will access the Turtle Beach web site.
- Clicking on the **TurtleRadio logo** at the bottom of the left menu will access the TurtleRadio web site.
- Clicking on the **Help on the Web** menu item will access the relevant help information from the Turtle Beach web site.



*The **Music Selection** pages may be password protected by setting the check box in the **Settings** → **File Access** screen.*

Music Selection

The **Home**, **Play Queue** and **Group List** screens work together with the **Music Selection** screens to let you select and play music. Because the web server runs on a PC screen, rather than being limited by the characters on the front panel display, selecting and playing songs is more intuitive. It's also easier to perform such tasks as assigning songs to the "Favorites" buttons on the remote control

Home

This is the web server's main screen, which emulates the controls on the front panel. From here you can set volume, song position, mute, random, and repeat. You can also see what song is currently playing and what song is coming up next in the "Play Queue".

The **Sleep Timer** setting on this screen lets you automatically stop the music after a preset time, such as when you're listening to music before falling asleep.

Play Queue

Click on this menu item to see the list of songs selected for playback. From here you can jump to any song in the queue. Note that the song currently playing will be noted by a "**← Now Playing**" symbol next to the song, which corresponds to the "Playing" song shown on the Home screen. The next song in the list corresponds to the "Next..." song on the Home screen.

Group List

Click on the **Group List** menu item to see the songs you've entered into the Group List. Songs are added to the Group List by pressing the **Add to Group** button at the bottom of the song selection pages, or by pressing the **Add** button on the front panel.

The Group List works just like a playlist created with AudioStation or other music management program—except you can create the Group List from the AudioTron front panel or the web server. You can play the songs in the Group List either by pressing the "Play Group" button at the bottom of the screen, or by selecting the Group List from the Lists menu item, just as you would select any other playlist.

Music Selection Menu Items

The menu items under the heading “**Music Selection**” correspond to the main menu display options on the AudioTron front panel—Title, Artist, Album, Genre, Net and Lists. These menu items let you select songs from your music library, just as you would from the front panel—but with *much* more control over song selection. For example, click on **Title** to see all of the songs in your library listed by title, or click **Artist** to select songs by Artist name, etc. You can even assign songs to the “Favorites” button on the remote control by clicking on the **Favorites** menu item.

Clock / Alarm

AudioTron can be set to display the time and date as well as act as an alarm clock, complete with a “snooze” feature! Click on the Clock **Settings** menu item to set the clock options and click on the **Alarm** menu item to set the alarm functions.



AudioTron Front Panel Clock Display



When the clock display is active, pressing the Stop button will display the main menu for song selection and pressing the Play button will display the last category selected in the menu.

Settings

The menu items under the **Settings** heading let you configure the way AudioTron operates, search for songs in your music library, update AudioTron’s firmware, search for Internet radio stations and more. Click on each menu item to see the available options and refer to the detailed descriptions in the following sections.



*The **Settings** pages require a password to access. The default password (**admin**) may be changed from the **Web Server Settings** screen.*

Music Selection

Selecting Songs and Internet Radio Stations

The web server Home screen shows the name of the currently playing song and the next song in the queue. From here, you can control all of the play transport functions, and access the other web browser pages by clicking on the left panel menu items.

To play songs from the Web Server

1. The menu items under the **Music Selection** section correspond to the menu items on the AudioTron front panel display (in addition to Favorites.) Click on one of these menu categories to select songs as you would on the AudioTron display. For example, clicking on **Title** presents an alphabetical list of the Titles in your music library.
2. To find a song by Title, click **Title** to activate the **Title Selection** screen. Navigate by using the alphabet letters at the top of the screen. Note that if you have many songs beginning with a certain letter, the list will be separated into multiple pages that can be selected by using the numbers underneath the row of letters.
3. To immediately begin playing a song in place of the currently playing song, click **Play** to the left of each song Title.
4. To add songs to the Play Queue without stopping the current song, check the boxes next to the song titles and press the **Add to Queue** button at the bottom of the screen.

➡ *Note that the first of the Titles displayed on the Web Server is always the "All Songs" playlist, making it easy to simply play all your digital music.*

➡ *You can change the number of items displayed on each page by changing the **Results per Page** setting on the **Web Server Preferences** screen, or by clicking on the "results per page" setting at the bottom of each screen..*

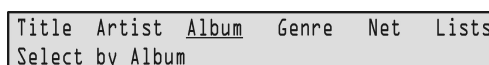
In the above example, the "filtering" functions of Advanced Menu Mode are not used, because the **Title** menu path does not require filtering criteria. However, some of the other categories provide additional steps as described in the following example for selecting songs by **Artist**:

To select songs by Artist

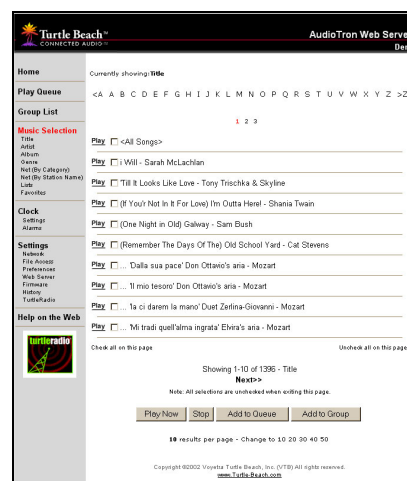
1. Click on the **Artist** menu item to activate the Artist Selection screen, which lists the Artists in the music database sorted by alphabetical order. To find a particular Artist, click on the alphabet letters at the top of the screen. If there are many artists beginning with the selected letter, the results will be listed in multiple pages which can be accessed by using the numbers at the top of the page, or by using the **<<Previous** and **Next>>** links at the bottom of the page.



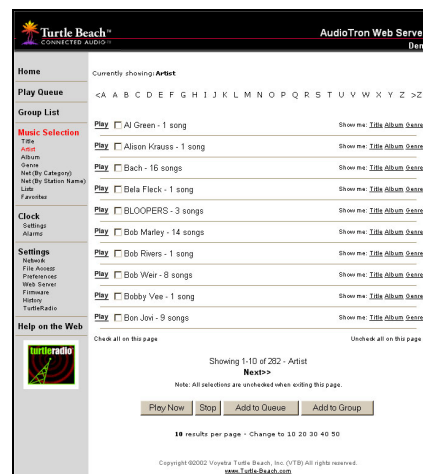
Web server **Music Selection** menu



Front panel main menu display



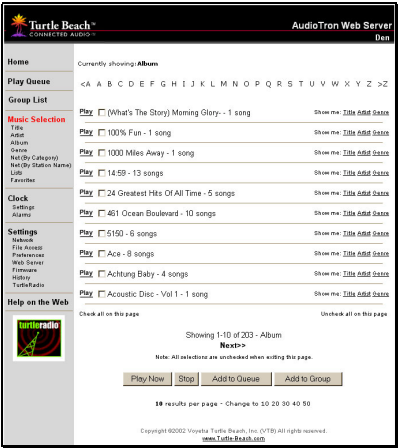
Web server **Title Selection** Page



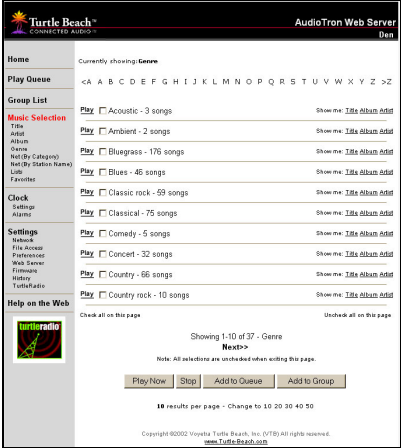
Web server **Artist Selection** Page



- 2. To immediately begin playing all songs by an Artist in place of the currently playing song, click **Play** to the left of the check box.
- 3. To add all songs by an artist to the Play Queue, select the checkbox next to artist name, then click the **“Add to Queue”** button. These songs will play after the songs already in the queue are done playing.
- 4. To find songs from a particular **Album**, **Genre**, or **Title** by an Artist, click on the links to the right of the artist’s name.
- 5. When selecting the **Artist** by Album, Genre, etc... the current selection will appear at the top of the screen. To clear the criteria and start over, click on the menu item on the left side of the screen to start over.
- 6. Follow this procedure for the Album and Genre categories that utilize the filter function.



Web server **Album** screen



Web server **Genre** screen

Play Queue

You can view and edit the songs in the Play Queue from the web server **Play Queue** screen, accessed by pressing the Play Queue menu item on the left.

The currently playing song will have a “← **Now Playing**” designation next to its label. To jump to another song, click on **Play** next to the title.

To remove a song or group of songs from the Play Queue, select the checkbox next to the item(s) and press the “**Delete from Queue**” button at the bottom of the screen.

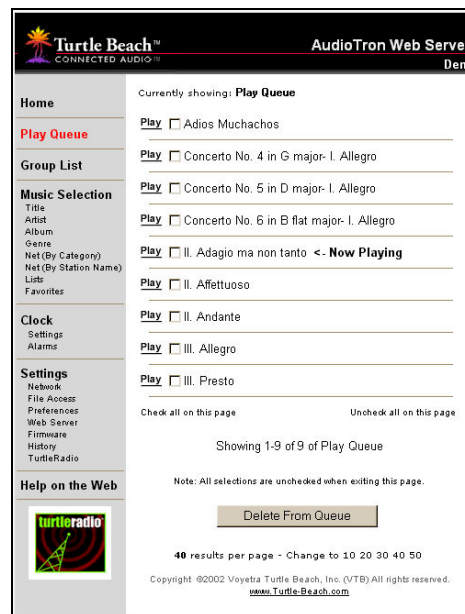
Favorites

The 16 Favorites buttons (labeled 1 – 16) and 4 Preset buttons (labeled A – D) on the remote control can each be assigned to load preset song lists into the Play Queue. These 20 buttons can be assigned from either the remote control (with the **Add FAV** button) or from the web server **Favorites** screen.

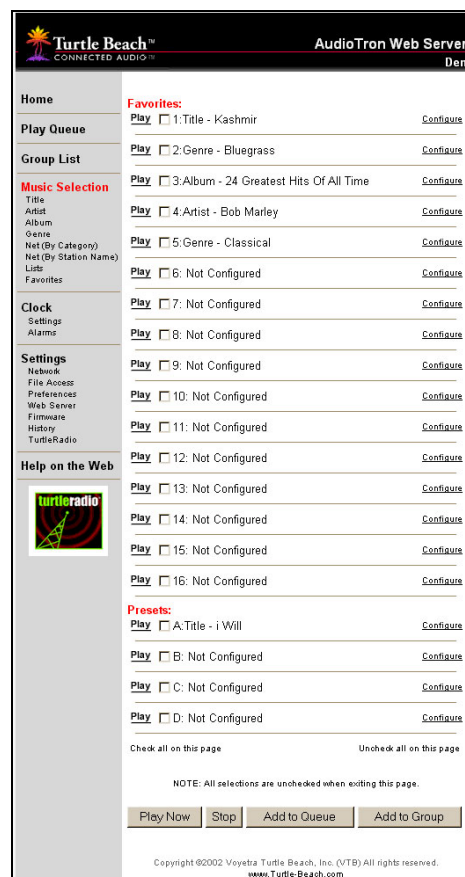
The Favorites buttons may be assigned songs by any of the categories in the main menu, which includes individual title, artist, album, genre, or playlist. For example, you can assign a single song title or all of the songs by an artist to a Favorites button. The following example describes how to assign a Favorites button to load songs into the Play Queue:

To assign songs to the Favorites buttons

1. Click on the **Favorites** menu item to activate the Favorites screen, which shows the assignment of the 16 Favorites buttons and 4 Presets buttons.
2. To play any of the Favorites or Preset buttons which have music assigned, click on **Play** next to the check box.
3. For this example, let's assign an album to Favorite button #3. Click **Configure** in the line for Favorite #3, then select **Album** from the left menu to activate the Album selection screen.
4. Check the desired album from the list, then click the **Set Favorite** button at the bottom of the screen to assign all songs in that album to Favorite button #3. Now, pressing button #3 on the remote control will immediately play the songs from the assigned album.
5. Song titles, genres, artists, lists, and Internet radio stations may be assigned to the other buttons using a similar procedure.



Web server **Play Queue** Screen



Web server **Favorites** screen

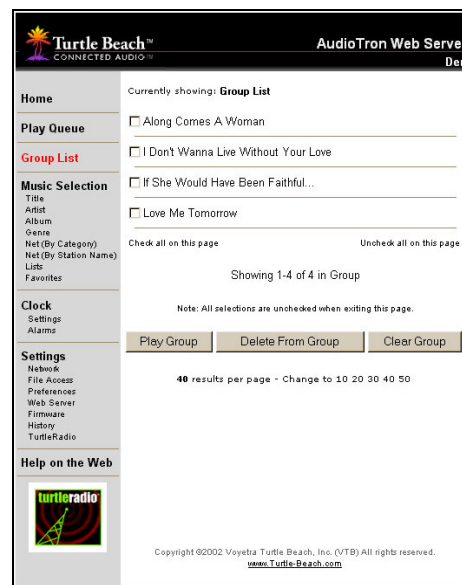
Group List

The Group List is a special play list to which you can add songs from the AudioTron front panel and remote control **Add** buttons or from the web server selection screens.

To play the songs in the Group List, select it from the **Lists** item on the main menu display or the **Lists** button on the remote control. The following example describes how to assign songs to the Group List from the web server:

To assign songs to the Group List

1. For this example, assume we'd like to add several songs to the Group List.
2. Click **Title** under the **Music Selection** menu to activate the Title screen. Select the check box next to the name of the desired songs.
3. Scroll to the bottom of each page with a checked song title and press "**Add to Group**."
4. When you're done, click on the **Group List** menu item to activate the Group screen. All of the selected songs should be listed in the screen.
5. To play the songs, press the **Play Group** button. You can also play the Group List by clicking on the **Lists** menu item and selecting **Group List** from the Playlist screen.
6. To remove specific songs, check the box next to the songs, then press **Delete from Group**.
7. To remove all songs, press **Clear Group**.



Web server **Group List** screen

Clock / Alarm

AudioTron is not only an amazing digital media playback device, but it can be one of the most accurate and configurable alarm clocks in your home!

Imagine waking up to your favorite MP3 playlist or Internet Radio, from an alarm that gets the exact time from an Internet time server! When the clock feature is enabled, the AudioTron front panel displays the time and date, along with any alarm settings you have configured.



AudioTron clock display

When the Clock feature is activated, the AudioTron LCD display will look like the illustration above. If the alarms are set, they will be indicated above the date display.



Pressing the Stop button on the front panel will activate the main menu display for a brief interval. While the main menu is displayed, you can select and play music just as if the clock display were disabled.

This section describes how to use the web server Clock Settings and Alarms screens to set the clock and alarms. Here's a quick overview of how they work:

1. To turn on the clock display, click on the **Clock → Settings** menu item to activate the **Clock Settings** screen. From there, select the **Display Mode** from the drop-down menu at the top.
2. Next, select where the clock gets its time and date and how they're displayed.
3. To set the alarms, click on the **Clock → Alarms** menu item to enter the **Alarm Settings** screen.
4. The **Snooze** function determines how long it will take the alarm to turn back after you've pressed any button or the knob on the front panel (except the Stop button).
5. The **Nap alarm** puts AudioTron into an "instant alarm" mode where it plays music once the Nap time setting is reached.
6. **Alarm 1** and **Alarm 2** work just like the alarm on a clock, where you can set the time and day for each one.
7. To change the alarm sounds, click on the **Change Alarm Sound** button under each alarm. This lets you navigate through your music library to find a specific song to play when the alarm sounds.

Clock - Settings

The **Clock Settings** screen displays the settings relevant to configuring the Clock feature. This screen is accessed by clicking on the **Settings** menu item under the **Clock** section at the left of the screen.

Clock Configuration

Display Mode: The clock feature can be enabled several different ways by selecting the options in the **Display Mode** pull-down menu settings and then pressing the “**Set Clock Config**” button:

- **Disable Clock:** This option turns off the clock feature.
- **Enable Clock using TurtleRadio:** This option turns on the clock feature and obtains the time from the TurtleRadio time server whenever you use the “**Search for New Stations**” feature in the TurtleRadio Settings screen. Although this is the easiest method of enabling the clock, the TurtleRadio server is not a true time server, so the actual time setting is accurate to only to 30-40 seconds as compared to the time obtainable from a true time server, as explained below.
- **Enable Clock using Manual Setting:** If your AudioTron is not connected to the Internet, or if you'd like to set your clock ahead or behind several minutes, you can use this setting to manually set the time, per the settings in the **Manual Time Setting** below.
- **Enable Clock using Time Server Setting:** This option uses the Internet Time Server Setting below to set the time using an Internet Time Server. This option requires an Internet connection and provides the most accurate time possible. A list of time servers is available at the Turtle Beach web site (click on the menu item “**Help on the Web**” for more information.)

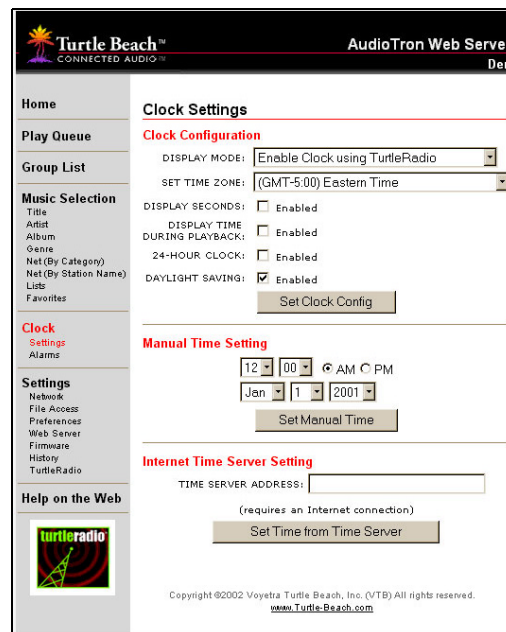
Set Time Zone: This pull-down selection lets you set your time zone so the AudioTron clock can properly display the time in your area. Note that if you use the manual time settings, this step is not necessary.

Display Seconds: When enabled, pressing the “**Set Clock Config**” button will set the clock to display Hrs: Mins: seconds. When disabled, the display will indicate Hrs: Mins.

Display Time During Playback: When enabled, pressing the “**Set Clock Config**” button will cause the time to be displayed during music playback, except when changing songs or selecting a new item. When unchecked, the clock display will appear only when the unit is not playing digital music.

24-Hour Clock: When enabled, pressing the “**Set Clock Config**” button will set the clock to display in 24-hour format.

Daylight Saving Time: When enabled, pressing the “**Set Clock Config**” button will move the time forward one hour from the time it receives from a Time Server. Note that enabling this will not cause the AudioTron to automatically move the time forward or backward twice a year!



Web server **Clock Settings** screen

Clock - Alarms

The **Alarm Settings** screen displays the settings relevant to configuring the clock alarms. This screen is accessed by clicking on the **Alarms** menu item under the **Clock** section at the left of the screen. AudioTron can sound two traditional alarms (Alarm 1 and Alarm 2) and one “Nap Alarm.”

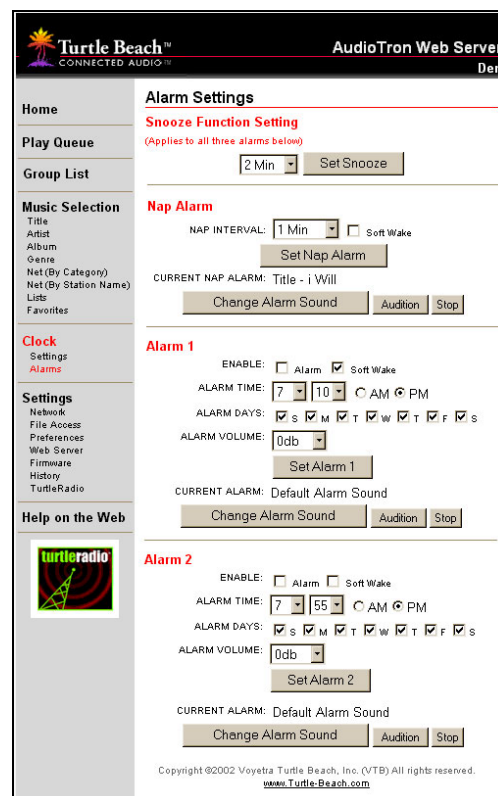
For example, you can use Alarm 1 and Alarm 2 to wake yourself up in the morning, remind yourself about an appointment, or have AudioTron start playing “Auld Lang Syne” on New Year’s Eve, while the nap alarm can be used if you’d like to have the AudioTron start playing music after a certain number of minutes or hours from the time you enable it.

Stopping the Alarm and Snoozing

When the alarm is sounding, pressing the knob on the front panel or any of the 16 Favorites buttons on the remote control will cause the unit to “snooze.” Pressing the stop button will cause the alarm to stop playback.



If an Alarm has been sounding for more than 30 minutes after the last time you hit Snooze, the AudioTron will turn off the Alarm automatically.



Web server **Alarm Settings** screen

Snooze Function Setting: This setting determines how long AudioTron will remain silent after the “Snooze button” has been pressed during alarm playback.

Nap Alarm

Nap Interval: This setting sets the time before AudioTron will start playing the **Current Nap Alarm** sound. For instance, if set to 1 minute, the unit will start playing the selected music one minute after the **Set Nap Alarm** button has been pressed.

Soft Wake: When enabled, the alarm will turn on gradually and increase in volume until reaching the specified volume level. Soft Wake will have no effect when using the digital audio output.

Change Alarm Sound: Pressing this button lets you select the song, group of songs, or Internet radio station that will play when the Alarm is triggered. To preview the alarm, press the “**Audition**” button next to the Alarm. To stop the preview, press the **Stop** button.

Alarm 1 and Alarm 2

The features of Alarm 1 and Alarm 2 are identical. The alarms operate independently. No settings will take effect until the **Set Alarm** button is pressed.

Enable: When checked, the Alarm is enabled (as indicated on the front panel display.)

Soft Wake: When checked, the alarm will turn on gradually and increase in volume until reaching the specified volume level.

Alarm Time: Selects the Alarm time (don’t forget to specify AM or PM!).

Alarm Days: Specifies what days of the week you would like the alarm to sound. By default, Monday through Friday are selected.

Alarm Volume: Changing this value will specify a new volume setting for the alarm.

Settings

Settings - Network

The web server **Network Settings** screen lets you configure AudioTron's network settings and is accessed by clicking on the **Network** menu item under the **Settings** section at the left of the screen.

Test Internet Connection: Press this button to check if AudioTron can access the Internet.

Use DHCP: If your network has a DHCP server, selecting this option will cause AudioTron to obtain its IP address information from the DHCP server.

Use Static IP Settings Below: Select this option if you do not have a DHCP server on the network or if you wish to specify your own network parameters. When this option is enabled, the settings in the sections "**Static IP Settings**" will take effect.

Static IP Settings

These settings will only be in effect if the "**Use Static IP Settings Below**" check box is selected. Press the "**Save Connectivity Settings**" button to activate the settings below:

Network Interface: Select **Ethernet** if AudioTron is connected to a 10BaseT Ethernet network or **Phone Line** if to an HPNA 2.0 network.

The settings for the following categories may be obtained from the AudioTron Setup Utility "**View Test Results**" screen:

IP Address: AudioTron's IP address.

Subnet Mask: IP Subnet Mask assigned to network.

Gateway: The IP address assigned to the network gateway. The gateway device provides Internet access to the network devices.

DNS Server: The IP address assigned to your network Domain Name Server (DNS). The DNS server finds Internet web sites by the name assigned to its IP address number.

Proxy Settings

Press the "**Save Proxy Settings**" button to activate the settings below:

Enable Proxy: If your network is using a proxy server, check this box, then enter the proxy address and port. Note that AudioTron will not support proxy server authentication.

Proxy address: The IP address of your proxy server.

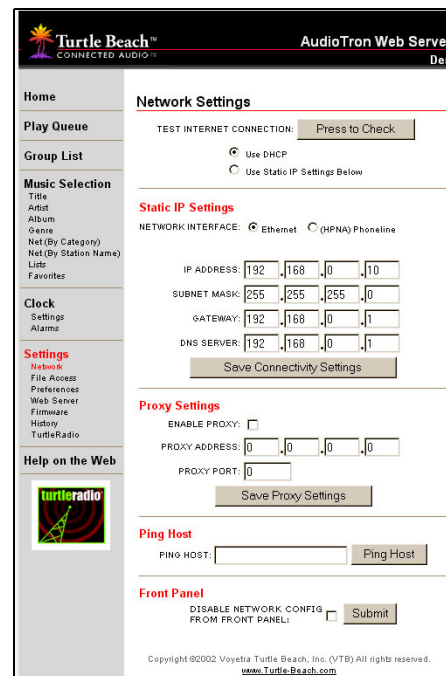
Proxy port: The port of your proxy server.

Ping Host

This setting is useful for gateway (try to ping an IP) and DNS (try to ping a domain name) tests. Enter the IP address and press the **Ping Host** button to ping the device at that address.

Front Panel

"**Disable network config from front panel**" lets you disable the editing of network configuration settings from the AudioTron front panel. To activate, check the box and press the **Submit** button. This option is useful in situations where the AudioTron is in an area where the network settings may be inadvertently altered by a curious user, which in turn could make the unit inoperable.



Web server **Network Settings** screen

Settings - File Access

The File Access Settings screen lets you configure features that relate to playback of the digital music files in your PC music library. This screen is accessed by clicking on the **File Access** menu item under the **Settings** section at the left of the screen.

Current number of files found: This is the number of music files found in your music library.

Check for New Files: Pressing this button causes AudioTron to search the PCs (i.e. "Hosts") on your network for new music files. Use this whenever you add music files to your music library or whenever you add PCs to your network.

File Playback: Check "Enabled" and click "Save File Playback Settings" to configure AudioTron to play songs from your music library. Disable this feature and enable the Internet radio function in the TurtleRadio Settings screen if you want to use AudioTron only as an Internet radio device.



If the File Playback option is disabled, AudioTron will not be able to play music from your music library.

Additional Pre-buffering: AudioTron plays music files by transferring data from the PC hard drive to AudioTron's internal memory (called a "buffer") via the network. The music file is transferred to AudioTron as individual "packets" of data interleaved with other network data. AudioTron's buffer is designed to hold enough data packets to assure that any temporary loss of data from the stream will not cause the audio playback to stop, or drop out.

The "Additional Pre-buffering" option determines the size of the buffer. With a lower setting, the time between pressing the Play button and the start of the song will be shorter because the song will begin to play after a smaller percentage of the buffer is filled. With a higher setting, there will be more of a delay because the song will not play until a greater percentage of the buffer is filled.

If the buffer is too small, it may cause "dropouts" if increased network traffic causes the buffer to empty before new data arrives. If the buffer is too large, it may cause a noticeable delay between the time the **Play** button is pressed and the time the song begins to play.

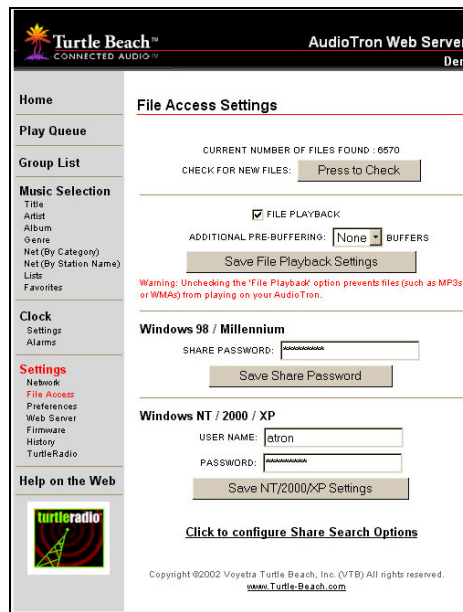
Since MP3 and WMA music files are compressed, they require a smaller buffer than WAV files (which can be up to 10 times larger.) Therefore, WAV files will exhibit a longer delay between the time **Play** is pressed and when the song begins playing.

Windows 98/Millennium Share Password: If you password-protected shared directories that contain song files, enter the password here so AudioTron can access the songs. Press "Save Share Password" to load the password into AudioTron.

Windows NT/2000/XP User Name: Sets a "User Name" used when the host PC is running Windows NT 4.0, 2000, XP or Linux. Note that the user name is case sensitive. Default is "atron". Press "Save" to load the entry into AudioTron.

NT/2000/XP Password: Sets a "User Password" used when host PC is running Windows NT 4.0, 2000, XP or Linux. Note that the password is case sensitive. Default is "atronpass". Press "Save" to load the entry into AudioTron.

Click to configure share search options: Click on this option to activate the Shares Configuration screen described in the next section.



Web server **File Access Settings** screen

Share Search Options

The **Share Search Options** screen lets you configure the directories where AudioTron will search for music files. To access this screen, click on **“Click to configure share search options”** at the bottom of the **File Access Settings** screen.

➡ For details on how AudioTron uses shared folders to find songs on your networked PCs, see the section entitled **“AudioTron and Shared Directories”**.

Share Search Mode

These three options determine where AudioTron will look for songs on your networked PCs after you press the **“Check for New Files”** button in the **File Access Settings** screen, or activate the **“Check for new music files”** option on the front panel.

To select one of these three options, check the option and then press the **Save Share Search Mode** button.

Option 1 - Search default folders in all shares: When this option is selected, AudioTron will only search for music files in shared directories with the specific names described in the section entitled **“AudioTron and Shared Directories”**. Choose this option if you configured your music directories with the AudioTron Setup Utility and you do not have music files in directories with other names.

Option 2 - Search all folders in all shares:

When this option is selected, AudioTron will search for music files in every shared folder on every networked PC. If you have many shared folders, using this option could significantly increase the time to search for music. Thus, it is suggested that this option only be used if you have music files stored in many folders that would be too difficult to consolidate into the default folders in option 1.

Option 3 - Search all folders in shared folders listed below: When this option is selected, AudioTron will only search for music files in the folders listed in the **Configure Shares Manually** section below. Use this option if your music is stored in several shared folders with names that do not conform with the default folders in option 1.

Configure Shares Manually

This section, activated when option 3 is selected, lets you specify the shared folders with your music files so that AudioTron will search only those folders.

Clicking the **Search Network for Shares** button will activate a search for all of the shared folders on your network, which will be listed next to **“Found Shares”**. After the search is done, you can either copy and paste the folder names from the list into the boxes below, or type the names directly into the boxes. Clicking the **Save Manual Search Settings** button will cause AudioTron to search only the listed folders when you press the **“Check for New Files”** button in the **File Access Settings** screen or activate the **“Check for new music files”** option on the front panel.



Web server **Share Search Options** screen

Settings - Preferences

The Preferences Settings screen lets you configure the way some of AudioTron's display and other functions operate. This screen is accessed by clicking on the **Preferences** menu item under the **Settings** section at the left of the screen.

Functional Preferences

Knob Default Function: Checking "**Volume**" will cause the knob to act as a volume control when turned while a song is playing. When the knob is pressed, it acts as "song position", letting you jump to a specific point in the song by turning the knob as the song is playing.

Checking "**Position**" will reverse these functions, so the knob powers up as a song position control and when pushed, controls volume.

Select Album by "Artist-Album": When enabled, the display will place the artist name prior to an album name.

Select Title by "Title-Artist": When enabled, the display will place the artist name after the song title.

Advanced Menu Mode: When enabled, turn on **Advanced Menu Mode** on the AudioTron front panel display. Un-checking will enable **Simple Menu Mode**. See the separate section in this manual explaining how these modes operate.

"More Songs Like This": When enabled, the remote control Artist, Album and Genre buttons will no longer operate as menu navigation buttons. Instead, pressing ARTIST, ALBUM, or GENRE, on the remote control will clear the existing play queue, and play only songs of the corresponding category. Note that this will not stop the currently playing song. See the separate section in this manual for more details on this feature.

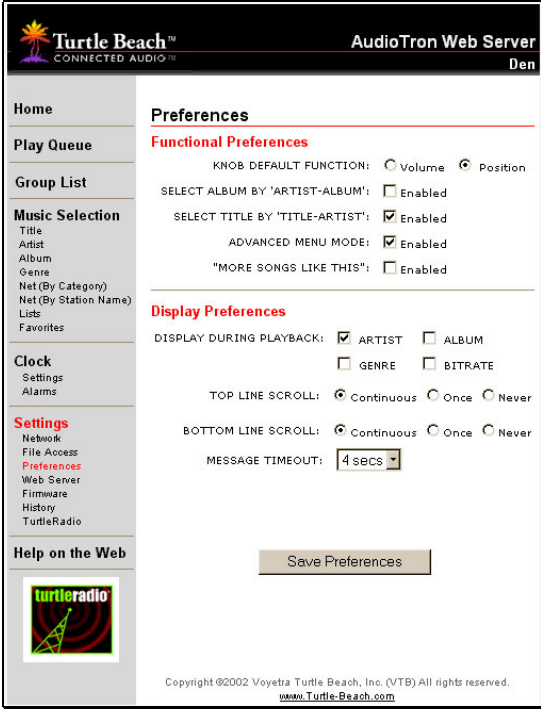
Display Preferences

Display During Playback: Checking any of the four options will display the option during song playback. For instance, if Bitrate is enabled, the bitrate of the song will be displayed along with it's title.

Top Line Scroll: **Continuous** scrolls the top line of the front panel display continuously if the message is longer than the number of characters. **Once** will scroll the line once and stop. **Never** will truncate characters that do not fit in the display.

Bottom Line Scroll: Same as the **Top Line Scroll** option, except it applies to the bottom line of the display.

Message Timeout: Controls how long the temporary messages on the front panel will be displayed.



Web server *Preferences* screen

Settings - Web Server

The Web Server Settings screen lets you configure the way certain functions on the web server operate. This screen is accessed by clicking on the **Web Server** menu item under the **Settings** section at the left of the screen.

Refresh Time: Sets the data refresh time of certain web interface functions.

Results Per Page: Sets the default number of items to display on Music Selection, Play Queue and Group List screens.

AudioTron Location: Lets you assign a name to identify the AudioTron being controlled by the web server, making it easier to identify when multiple AudioTrons are on your network. The name will appear at the top right of each web server screen (e.g. in the illustration, the name “Den” has been assigned and appears at the top right).

Web Server Password: Lets you restrict access to the web server Settings pages by allowing access only with the proper password. The default password (**admin**) can be changed by entering a new password in this box. The password can be reset to the default “**admin**” by using the “**Restore Factory Defaults**” as described above, or from the AudioTron front panel Options.

Confirm Password: Retype the password into this box to make sure it’s correct.

Password Protect Music Selection Pages: To also restrict access to the Music Selection pages, check this box and press the **Save Web Server Settings** button. This will effectively require a password to use any of the web server features.



If you disable the Front Panel Network settings from the Network Settings screen and forget your web server password, the unit must be returned to the factory for reprogramming, as there will be no way to retrieve the password from the web server or front panel options.



Web server **Settings** screen

Settings - Firmware

The Firmware Settings screen lets you update AudioTron's firmware, which you can download from the Turtle Beach web site. This screen is accessed by clicking on the **Firmware** menu item under the **Settings** section at the left of the screen.



See the section entitled **"Updating AudioTron's Firmware"** for more details on the firmware update process.

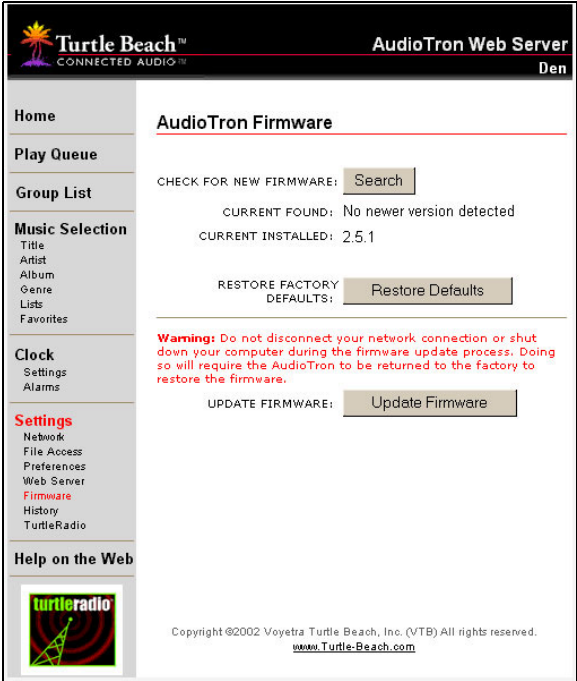
Check for new Firmware: Press the **Search** button to initiate a search for the AudioTron firmware file on all of the directories accessible to AudioTron (as determined by the **Shares Access Settings** screen.)

Current Found: This will display the latest firmware version found in any of the directories accessible to AudioTron.

Current Installed: This displays the firmware version currently installed in the AudioTron.

Restore Factory Defaults: Clicking the **"Restore Defaults"** button will reset AudioTron to its original factory default settings and discard all user-customized changes. When using this option, turn the rear panel power switch off and back on to reset AudioTron.

Update Firmware: If **Current Found** is a newer version than **Current Installed**, then press the **Update Firmware** button to load the newer version into AudioTron. After the update is complete, turn AudioTron off and back on with the rear panel power switch.



Web server **Firmware Settings** screen

Settings – Network History

The History screen displays the events that occurred when AudioTron logged on to the network, which is useful for troubleshooting network issues. This screen is accessed by clicking on the **History** menu item under the **Settings** section at the left of the screen.

Some of the information displayed includes:

Local IP Address = x.x.x.x: The IP address that AudioTron is currently using.

AudioTron Name = Atronxxxx: A unique name assigned to AudioTron that can be used in the web browser to access the Web Server.

Local MAC address = x:x:x:x:x: The local MAC (Ethernet) address for AudioTron.

Local Net Mask = x.x.x.x: The net mask AudioTron is using.

Local Gateway = xxx.xxx.xxx.xxx: The IP address of the node that connects AudioTron to the Internet for using Internet radio.

Local DNS Server = xxx.xxx.xxx.xxx: The address of the Domain Name Server that translates URLs to IP addresses.

Initial Search at x days x hrs x mins:

Indicates that the first search of the network occurred at this amount of time since the AudioTron was booted.

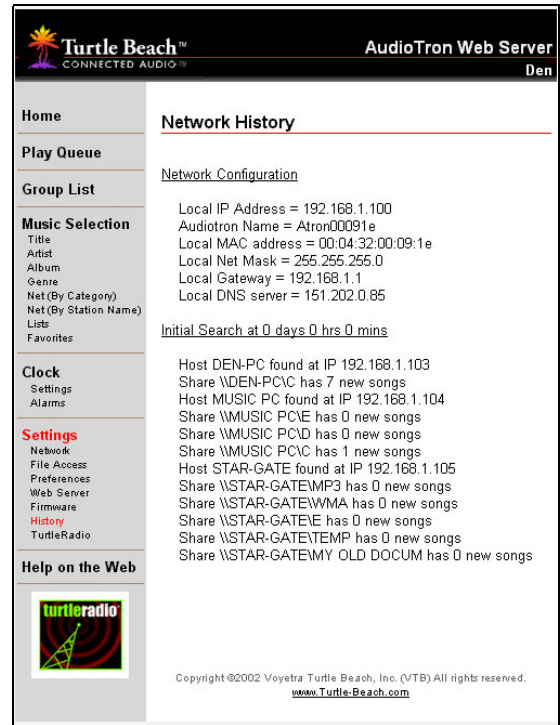
Host [hostname] found at IP x:x:x:x: Indicates that the host was found at the indicated IP address.

Update Search at x days x hrs x mins: Indicates when the last search for new music occurred.

Share [sharename] has xx new songs: Indicates the number of new songs found on the indicated share.

[Sharename] - Share Access Denied: Indicates that access to this share was denied because the share password was wrong.

[Sharename] – Error accessing share: Indicates that there was a non-password related error accessing this share.



Turtle Beach™
CONNECTED AUDIO™

AudioTron Web Server
Den

Home
Play Queue
Group List
Music Selection
Title
Artist
Album
Genre
Net (By Category)
Net (By Station Name)
Lists
Favorites
Clock
Settings
Alarms
Settings
Network
File Access
Preferences
Web Server
Firmware
History
TurtleRadio
Help on the Web

Network History

Network Configuration

Local IP Address = 192.168.1.100
Audiotron Name = Atron00091e
Local MAC address = 00:04:32:00:09:1e
Local Net Mask = 255.255.255.0
Local Gateway = 192.168.1.1
Local DNS server = 151.202.0.85

Initial Search at 0 days 0 hrs 0 mins

Host DEN-PC found at IP 192.168.1.103
Share WDEM-PC\C has 7 new songs
Host MUSIC PC found at IP 192.168.1.104
Share \\MUSIC PC\D has 0 new songs
Share \\MUSIC PC\C has 1 new songs
Host STAR-GATE found at IP 192.168.1.105
Share \\STAR-GATE\MPI3 has 0 new songs
Share \\STAR-GATE\WMA has 0 new songs
Share \\STAR-GATE\E has 0 new songs
Share \\STAR-GATE\TEMP has 0 new songs
Share \\STAR-GATE\MY OLD DOCUM has 0 new songs

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Web server **Network History** screen

Settings - TurtleRadio

The TurtleRadio screen displays the settings relevant to configuring the TurtleRadio feature. This screen is accessed by clicking on the **TurtleRadio** menu item under the **Settings** section at the left of the screen.

Total number of stations found: This shows the number of Internet radio stations found at the TurtleRadio web site, which represents the number of stations listed in the **Net (by Station Name)** screen.

Check for New Stations: If the AudioTron has access to the Internet via the network, pressing this button will connect with TurtleRadio.com and search for new Internet radio stations. The number of stations found will be indicated above the button.

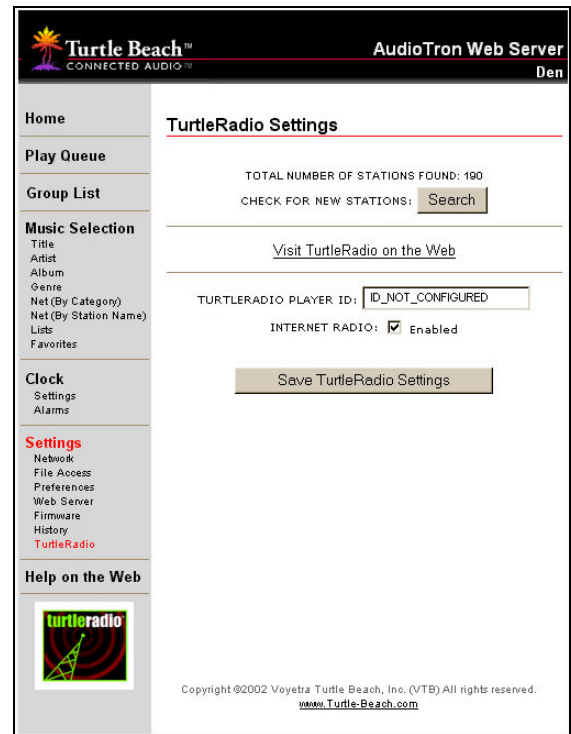
➡ *To check if AudioTron can access the Internet via the network, use the **Check Internet Connection** feature on the **Network** screen.*

Visit TurtleRadio on the Web: If your PC has access to the Internet, clicking here will launch the TurtleRadio web site, where you can configure Internet radio stations for AudioTron, and sign up for TurtleRadio.

TurtleRadio Player ID: Enter your TurtleRadio Player ID to access your TurtleRadio station list. (The TurtleRadio Player ID is issued to you after registering at the TurtleRadio web site.) Press **“Save”** to load the entry into AudioTron.

Internet Radio Enabled: To activate the AudioTron Internet radio feature, check this box and press **“Save TurtleRadio Settings”**.

➡ *Note that the Internet Radio feature is turned off by default from the factory.*



Web server **TurtleRadio Settings** screen

Web Server “Thin-Client” mode

The AudioTron web server can run in a “thin client” mode compatible with the smaller screen on a PocketPC or certain other small web access devices.

To use a PocketPC to control AudioTron from the web server, the PocketPC must be connected to the network, either through a wireless link, such as an 802.11 interface, or an Ethernet interface with CAT-5 cable.

To access the web server from the PocketPC, enter the AudioTron name into the browser as you would on a standard PC. AudioTron will automatically detect the browser type and activate the “thin client” page style to format the web server screens for the smaller PocketPC screen.

You can also access the thin client page by typing in the AudioTron’s IP address. For example, if AudioTron is assigned to the IP address 192.168.1.100, you’d enter the following into the browser:

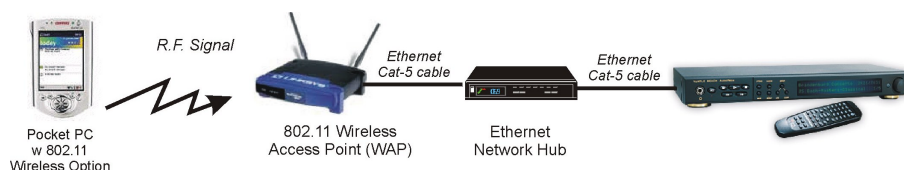
http://192.168.1.100/index_thin.asp



Compaq iPaq PocketPC

Using a PocketPC as a Wireless Remote Control

The most useful application for running the web server from a PocketPC is to control AudioTron from a wireless Ethernet connection via an 802.11 Wireless Access Point (WAP) and a wireless network adapter for the PocketPC. This configuration turns the PocketPC into a remote control for every AudioTron on your network.



Controlling an AudioTron with a PocketPC RF remote

In this illustration, the wireless iPaq handheld device includes an 802.11 adapter, allowing it to communicate with the Wireless Access Point (WAP). The WAP is configured as a node on the network via a hub. This enables you to control AudioTron from the iPaq’s browser from anywhere in your home.

For more information on creating a wireless access point to your network, visit www.linksys.com and www.compaq.com. For more information on the Compaq iPaq PocketPC device, visit www.compaq.com.

Maintaining your Music Library

Backing up the Songs in your Music Library

One of the advantages of a digital music library on a PC is that you can back-up your entire music collection and restore it should something happen to your originals. A music collection of 5,000 songs recorded in WMA or MP3 formats can consume more than 25GB of hard drive space, which is a significant amount of data. To play it safe, you should back up this data to other media just in case your music hard drive fails. After you've backed up the library, you can rely on incremental back ups for new music that has been added to the library since the initial full backup.

Backing up this data can be accomplished in a number of ways:

- **Tape Drive Backups:** Tape backup provides an inexpensive and convenient way to back up large amounts of data. A major advantage of tape is that you can store it in a fireproof box or off site. A disadvantage is that it is slower to back up and restore than, say, backing up to another hard drive.
- **Adding a second hard drive to one of your PCs:** Large-capacity hard drives have become cost-effective enough to use as a backup for a music library. Connecting a second large capacity drive to your music library PC lets you copy the library from the primary drive to the backup drive using Windows Explorer. When connecting the second drive, its best to use the secondary IDE bus that is not connected to the primary drive, since data transfer rates on drives connected to separate IDE cables are faster than drives connected to the same IDE cable. Although using a second drive is fast and convenient, the drawback is that it cannot be stored off site and it too can crash—although in most cases it is unlikely that both drives will crash simultaneously.
- **Adding a removable hard drive bay:** Placing the second drive in a removable drive bay lets you safely store the drive either off site or in a fireproof box, affording much of the same benefits of a tape backup with the speed of a hard drive.
- **Adding a Network Attached Storage (NAS) device to your network:** A NAS can be used to store your music library files on a drive that does not require a PC, so you can play your music with AudioTron without the need for a PC to be powered on. Of course, the data on the NAS drive also should be backed up, so one of the other methods for backing up the data should be implemented for the NAS.
- **Backing up your music files to Recordable Compact Discs (CD-R):** AudioStation can be used to burn data CDs from your music library. These data CDs not only provide backup for the library, but can also be used to play your music library on CD players compatible with MP3 and WMA file formats. Although slower than other methods, this serves the purpose of backup, off site storage, and a source of music while travelling. With a typical 640MB CD, backing up 25GB of music would require approximately 40 CDs.

Adding Songs or PC Hosts to your Music Library

Whenever you add songs or playlists to your music library, each AudioTron connected to the network must rescan the library so the internal database tables can be updated with the new data. Also, if you add PCs ("hosts") to the network, each AudioTron must rescan the network in order to recognize the new hosts. The network scan can be initiated either from the AudioTron front panel or from the web server as follows:

- **From the Front Panel:** Press the **Options** button to display "**Check for new music files?**" Press the control knob to select "**Yes**" to search the network for hosts, music files and playlists not already in AudioTron's local database. If new music files or hosts are found, they will be added to the database.
- **From the web server:** Go to the web server **File Access** page and click on the **Press to Check** button next to **Check for New Files**.



If there are multiple songs with the same name in the music library, AudioTron differentiates between them by adding a number in parentheses after the name of the song (e.g., "Song" and "Song - (1)".)

Note that the “**Search for new music**” function does not remove songs or playlists that have been deleted from the music library, nor does it capture new tag information for previously logged songs. Refreshing the AudioTron database for these changes requires that you reboot AudioTron from the rear panel power switch so it re-scans for music and completely rebuilds its internal database.

If AudioTron fails to find music that you are certain is on one of the PCs in your network, run the **AudioTron Setup Utility** (as described in the Setup Guide) to determine if the files are accessible to AudioTron. For example, if the files are in directories that are not shared, AudioTron will not be able to access them. The web server provides several different options for setting up your music directories, and the AudioTron Setup Utility “**Fix It**” feature lets you easily configure a directory for AudioTron access, as described in the Setup Guide.

Managing Your Music Library with AudioStation

➡ See the *AudioStation* reference manual on the *AudioTron* CD for a detailed description of features.

AudioStation is a valuable tool that lets you play audio CDs, transfer CD tracks to your digital music library, play songs from your music library, listen to Internet radio and manage your TurtleRadio stations. AudioStation's file management architecture closely resembles that of AudioTron, making it easier to manage your library than using other PC jukebox programs.

The tabs on the left of the main screen activate AudioStation's modes of operation:

- **CD Tab:** From here, you can play and record CDs from your PC's CD drive.
- **Music Library Tab:** From here, you can listen to your music library, burn custom CDs of your favorite songs and listen to Internet streaming audio configured in the Internet Tab.
- **Internet Tab:** From here, you can access the TurtleRadio web site to configure custom radio stations, as well as access music web sites for downloading music files.

AudioStation lets you easily manage and play your music library using similar "selection lists" as AudioTron, including:

- **All Tracks (equivalent to "Title" in AudioTron's selection display)** – Displays all tracks in the music database. In addition to MP3, WMA and WAV files (which are compatible with AudioTron) the All Tracks feature will display MIDI files and AVI movie files, which can be played on your PC with AudioStation.
- **Albums** – Displays songs grouped by CD title.
- **Artists** – Displays songs grouped by Artist name.
- **Genres** – Displays songs grouped by Genre.
- **TurtleRadio** – Just like the AudioTron **Net** main menu selection, this displays your custom Internet radio stations list downloaded from the TurtleRadio web site.
- **User Playlists (equivalent to "Lists" in AudioTron's selection display)** – Displays songs grouped into custom playlists.

Benefits of Using AudioStation

For AudioTron users, the benefits of using AudioStation instead of another PC jukebox program include:

- Guaranteed compatibility of tag and song formats of CDs ripped using AudioStation.
- Batch processing of tag data. For example, it's easy to change the artist name or genre of a large group of songs.
- CD tracks can be ripped to WAV format with proper tag information.
- You can listen to TurtleRadio stations, add stations to your custom station list and edit station names that are displayed in AudioTron.
- The AudioStation and AudioTron music database views are very similar, so it's easier to manage your music database.



AudioStation can be used to build and manage your music library and Internet Radio station lists.

Digital Music File Formats

AudioStation plays and records music files in MP3, WMA and WAV formats. MP3 and WMA compressed audio formats reduce the size of an audio file by removing some of the sounds determined to be “inaudible” by the encoder. Although the playback quality of these compressed audio formats is good enough for most listeners, some audiophiles can hear the difference between compressed and uncompressed audio. For this reason, AudioTron is capable of playing true CD-quality audio in uncompressed WAV format when used with an Ethernet network.



A unique feature of AudioStation is its ability to embed tag data into WAV files compatible with AudioTron.

WAV format preserves CD-Quality audio, which is sampled at 16 bits 44.1kHz. Although this is the purest form of audio, it also takes up a significant amount of hard drive space (a typical three-minute song consumes more than 30MB of hard disk space.) Playback of uncompressed WAV audio will be most important for audiophiles who can discern the loss of dynamic range and other limitations of compressed audio formats. For these listeners, maximum fidelity will be achieved when playing WAV files through AudioTron’s S/PDIF optical digital output.

MP3 (MPEG-1 Layer III) format uses a compression process that implements psychoacoustic principles to reduce the file size while preserving a high level of sound quality. Digital music files encoded using MP3 technology (“MP3 files”) are very popular on the Internet, due to their combination of good sound quality and small file size (a three-minute song can be reduced to less than 3MB—a factor of 10 reduction as compared to WAV format.)

WMA (Windows Media™ Audio) format was developed by Microsoft as an alternative to MP3 for compressed digital audio. Similar in many ways to the equally common MP3 format, WMA offers equal sound quality in an even smaller file size.

In most cases, the MP3 or WMA formats offer acceptable listening quality, especially when recorded at the higher sample rate options. However, the following table lists some of the issues to consider when deciding which format to use for storing music files:

WAV format benefits	WAV format drawbacks
- Preserves all of the qualities of the original CD recordings by maintaining the original 16-bit, 44.1kHz standard used for CD recordings. MP3 and WMA formats remove audio information that is determined to be “inaudible” in order to compress the file size. - The highest fidelity is achieved when using AudioTron’s optical digital output with uncompressed WAV format. - WAV format lets you burn high-quality custom CDs from your music library with AudioStation. Although you can also burn a CD from files saved in MP3 or WMA format, these compressed formats must be converted to uncompressed WAV format prior to creating the CD. This process will reduce the audio quality of the resulting CD.	- Typically, WAV format does not include song tags as do MP3 and WMA formats. So, AudioTron will only display the file name and can’t display or sort songs by Title, Artist, Album, Genre, etc.. However, AudioStation lets you add tag information to WAV files so that they can be sorted and displayed just like WMA and MP3 formats. - WAV files cannot be transferred to portable digital audio players. Typically, these players are only compatible with MP3 and WMA formats. - WAV format can take up more than 10 times as much hard drive space as MP3 and WMA formats. - AudioTron does not support WAV format on an HPNA network. An Ethernet network is required for playback of WAV files.

Song Tags (Title, Artist, Album, Genre, etc.)

A song “tag” (also called an “Attribute” or “Track Property”) refers to data embedded as a text header in the MP3, WMA or WAV file. The data includes information about the track (e.g. artist, title, genre, etc.) which can either be automatically obtained from the CDDB database or entered manually.

When recording CD tracks to the hard drive, the tag information can be viewed in AudioStation’s **Track Information** dialog, accessed by right-clicking on a highlighted track and selecting **Track Information**.

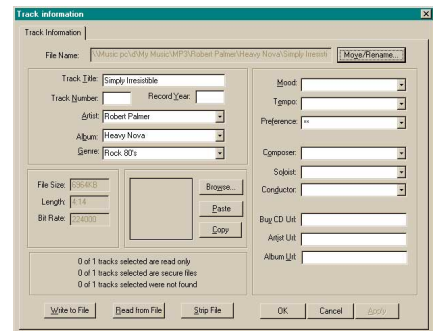
The proper management of tag data is important for optimum use of AudioTron because it affects how songs are accessed in the main menu. For this reason, it is suggested that the track tag information be carefully checked each time a CD is converted to digital format, so the tag data will be consistent. For example, it is best to avoid entering artists as “The Beatles”, “Beatles” and “Beatles, The”, since this would create three separate categories for the same artist and make it difficult to find tracks by that artist.

Unfortunately, there are different versions of tag formatting, which can lead to incompatibilities among tag data when the music files have not been recorded using the same PC jukebox program, or when music is downloaded from the Internet. Using AudioStation as your CD recording software can avoid these issues by assuring consistency in tag data format. To modify groups of song tags, drag and drop the song files from the right side “playlist” screen into the appropriate category on the left side “library” screen and AudioStation will change the tag accordingly. This operates like a “batch editor” for tags and is useful for cleaning up inconsistent tags.

For more information on tags, check out the web site www.ID3.org.



AudioTron can display tag information saved in the Windows Media (WMA), MP3 ID3 version 1.0, 1.1 and 2.3 formats and WAV files tagged in AudioStation. Tags in other formats may not display properly.



AudioStation “Track Information” dialog shows Tag data.

Security Features in WMA Music Files

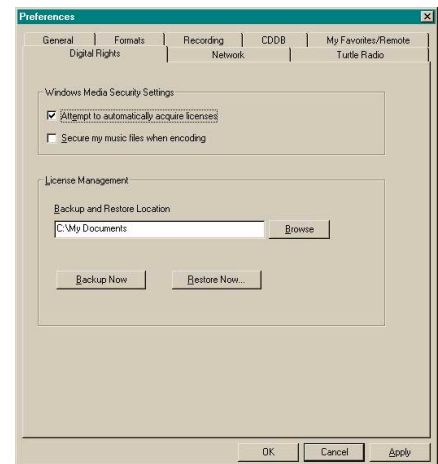
The WMA file format provides a “security” feature that encrypts song files so they may be played but not copied. AudioTron cannot play music files encrypted with this security feature.



AudioTron cannot play songs recorded with the “secure” feature enabled. The security setting in Windows Media Player and AudioStation should be turned off before converting CD tracks to WMA files for use with AudioTron. Once recorded, a song’s security feature cannot be turned off. The song must be re-recorded with the security option turned off.

To turn off the WMA recording security feature in AudioStation

1. Activate the AudioStation “**Preferences**” dialog by clicking on **Options → Preferences**.
2. Click on the “**Digital Rights**” tab and uncheck the “**Secure my music when recording**” option.
3. Click the “**Apply**” button, then click on the “**OK**” button to exit.



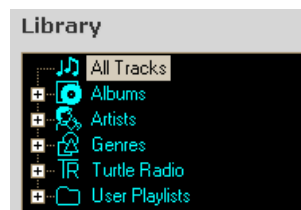
AudioStation Digital Rights Tab.

Using AudioStation to Create Playlists

Playlists are custom song lists created in AudioStation (or other compatible PC jukebox program) and accessed from the AudioTron “Lists” menu category. Playlists are stored in the AudioStation Music Library tab under the “**User Playlists**” folder. When you click on this folder, it expands to show all of the custom playlists you’ve created. Clicking on a playlist will list all of the songs in the Playlist screen.

Playlists adhere to two types of formats, M3U and PLS, each compatible with AudioStation and AudioTron.

AudioStation exports playlists to M3U playlist files, which can be read by most other PC jukebox players. M3U files are lists of ‘pointers’ to the locations of MP3 or Windows Media (WMA) files.



User Playlists is the last category in the AudioStation Library Folders list

To create a User Playlist

1. Click on the **Music Library Tab**, then click on the + next to the “**User Playlists**” folder in the Library tree (on the left side of the screen). Right-click “**default**” and select **New Playlist**, or click on the **New Playlist** button above the Playlist pane (on the right side of the screen) in the Music Library tab window.
2. Drag-and-drop tracks from the Playlist screen on the right side to the User Playlist folder you’ve defined on the left side. For example, select **All Tracks** in the Library tree, then “drag and drop” tracks from the **Playlist** pane (on the right) to the Playlist folder in the **Library tree** on the left.
 - *You can select a group of tracks by holding down the Control (Ctrl) key and left-clicking on the Tracks that you wish to select. Or, to select a group of consecutive Tracks, click on the first Track that you wish to select. Then hold down the Shift key and click on the last Track in the list that you wish to select. All Tracks between the first and last Tracks in the list will be selected.*
3. You can also add tracks to your playlist by highlighting the track and pressing “**Send To → User Playlists**”. This will activate a “fly out” menu listing all of your User Playlists.
4. To re-order the tracks in a list, drag-and-drop the track to a new position in the list.

To add a Track to a User Playlist

To add more tracks to an existing User Playlist, highlight the track in the Playlist window on the right side and drag-and-drop it to the User Playlist folder in the Library tree in the left side.

To Import a Playlist

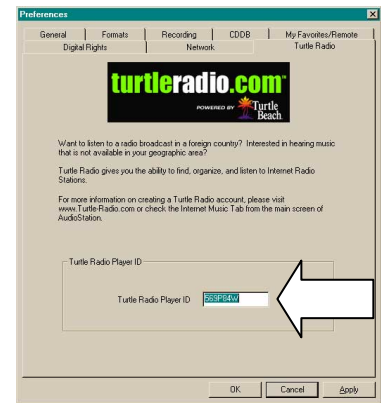
Playlists in M3U and PLS formats that were not created with AudioStation can be imported to the User Playlist folder with the **File Menu → Import Playlist** feature.

You can also add tracks to your playlist by highlighting the track and pressing “**Send To → User Playlists**”.

Using AudioStation to Manage Your TurtleRadio Station List

Entering your AudioTron TurtleRadio Player ID into AudioStation lets you play the same TurtleRadio stations with AudioStation. You can also manage the station list with AudioStation by adding stations and editing station names without having to re-visit TurtleRadio.

To enter the TurtleRadio Player ID, click **View → Preferences → TurtleRadio**. Then enter the Player ID used in the AudioTron web server **Access Controls** Tab.



AudioStation TurtleRadio List

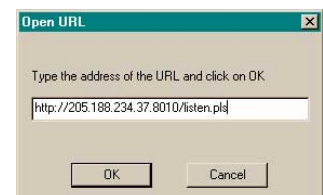
The TurtleRadio station list is accessed from the AudioStation **Library Menu Tree** under the **TurtleRadio** folder. Clicking on the **+** sign next to the TurtleRadio folder will show the categories you've configured in the custom station list at the TurtleRadio web site. Clicking on a category shows the stations in the Playlist window, along with their source URL, as shown below.



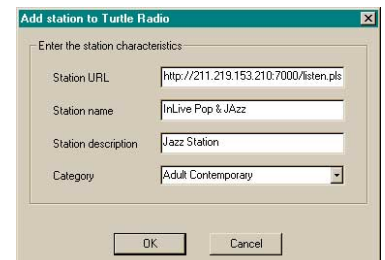
AudioStation TurtleRadio list

When you've found a station URL from a broadcasting web site that you'd like to add to a category, click on **File → Open URL** and enter the URL into the **Open URL** dialog box.

To play the station on AudioTron, update your TurtleRadio list by clicking on **"Send To"** at the top of the playlist window, then select **"TurtleRadio"** from the drop down menu. This activates the **"Add Station"** dialog, which lets you enter station name, description and genre along with the URL.



"Open URL" dialog box



"Add Station" dialog box

AudioTron and Shared Directories

Shared Directories

File directories (or “folders”) can either be “shared” or “not shared”. The files in a shared directory are available to other users on the network, while the files in an un-shared directory are only accessible on the PC where it resides. By limiting the extent to which other users can access your networked PC's file system (i.e. directories and files), the “sharing” setting lets you keep your files safe from unauthorized access and accidental modifications by other users. AudioTron can only access music files from shared directories.



The AudioTron Setup Utility lets you check how directory shares are set up on any PC accessible on the network.

File sharing operates only when Windows is set to enable “File and Printer” sharing.

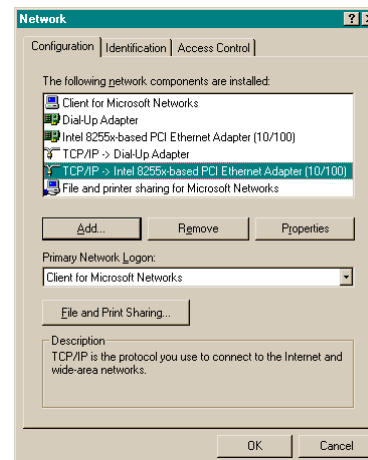
To set File and Printer sharing in Windows 98

1. Launch the Windows Control Panel (**Start → Settings → Control Panel**). Double click on the **Network** icon to launch the **Network Dialog**.
2. Click on the **File and Print Sharing** button.
3. In the dialog box that appears, check the options “**I want to give others access to my files**”.
4. Close all of the windows and reboot your PC if prompted.

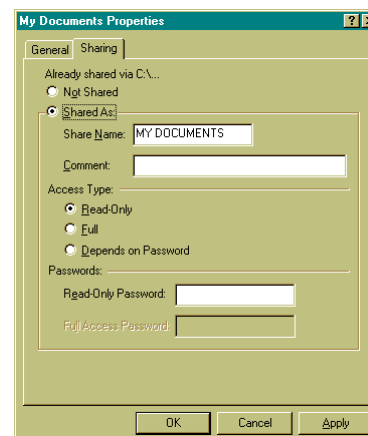
Each directory can be set as shared or unshared. All of the directories under a shared directory are automatically set as shared, so they don't have to be set individually.

To set up a shared directory

1. In the Windows Explorer directory window, right click on the directory name and select the “**Sharing**” option from the menu. If there is no “Sharing” option, see the above step to check for File and Printer Sharing settings in the Network dialog.
2. From the **Share Properties** screen, Select “**Shared As**”. The “**Share Name**” is the name of the sub-directory you're setting as a “shared directory”.
3. For “**Access Type**”, select “**Read Only**”.
4. Press “**OK**” to close the window.



Windows “Network” screen



Windows “Share Properties” screen

AudioTron Shared Directories Default Settings

By default, AudioTron searches for music files (MP3, WMA and WAV) and playlists (M3U and PLS) in directories named **My Music**, **Music**, **Audio** and **My Documents\My Music** that reside *under* a shared directory. This restriction is imposed in order to accelerate the search for music files on large hard drives and multiple PCs.



*A “**Nested Share**” condition occurs when the directories under a shared root directory are also shared. This case should be avoided, since AudioTron will list the same songs multiple times if they're located in nested shares. Note that the AudioTron Setup Utility can check for and correct “nested shares”.*

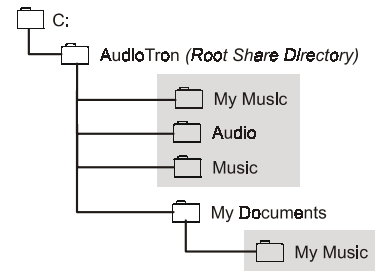
As an example of why AudioTron provides this directory restriction, consider the case where drive C: is shared and the conditions were not imposed. If AudioTron were to look in the root share (in this case C:) as well as in every directory below the root share, it would search the entire hard disk for music files. A large hard disk full of non-music files, such as programs and data, would take a very long time to search from one end to the other. For this reason, AudioTron ignores all directories other than those with specific names under the root, thereby significantly reducing the search time for logging all of the files in a large music library.

Once the search is completed, AudioTron keeps a local database of the file names in its internal memory so it does not have to search the drives each time a song list is requested. If more songs are added later on, the “Search for New Music” menu in the Options display and web server can be used to add only the new file names to AudioTron’s local directory, which saves the time of logging all of the music files it already knows about. If songs are deleted from the network drives, AudioTron must be re-booted in order to remove the files from its internal database.

In the following examples, AudioTron would find music stored in the shaded directories:

Shared Directory Example 1

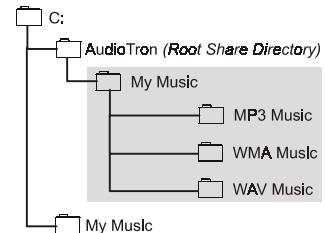
- AudioTron will not find music in C:\ because it is not under a shared directory.
- AudioTron will not find music in C:\AudioTron because it is the root share.
- AudioTron will not find music in C:\My Documents because it does not follow the naming convention.
- AudioTron will find music in C:\AudioTron\My Music, C:\AudioTron\Audio, C:\AudioTron\Music and C:\AudioTron\My Documents\My Music because they follow the naming convention and reside under the shared directory \AudioTron.



Example 1

Shared Directory Example 2

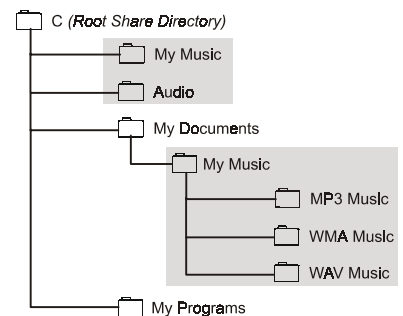
- AudioTron will not find music in C:\ because it is not under a shared directory.
- AudioTron will not find music in C:\AudioTron because it is the root share.
- AudioTron will not find music in C:\My Music because it is not under a shared directory (even though it follows the naming convention.)
- AudioTron will find music in C:\AudioTron\My Music because it resides under a shared directory and follows the naming convention.
- AudioTron will find music in C:\AudioTron\My Music\MP3Music, C:\AudioTron\My Music\WMAMusic and C:\AudioTron\My Music\WAVMusic because they reside under C:\AudioTron\My Music.



Example 2

Shared Directory Example 3

- AudioTron will not find music in C:\ because it is the root share. AudioTron will not find music in C:\My Programs or C:\My Documents because they do not follow the naming convention.
- AudioTron will find music in C:\My Music, C:\Audio and C:\My Documents\My Music because they follow the naming convention and reside under a shared directory.
- AudioTron will find music in all directories under C:\My Documents\My Music, even though they do not follow the naming convention (because they reside under C:\My Documents\My Music.)



Example 3

Overriding AudioTron's Default Directory Settings

Web Server Shared Directory Features

The AudioTron web server lets you select how you'd like AudioTron to search for music files in shared directories on your networked PCs.

Search default folders in all shares: This option will only search for music files in shared folders that adhere to the AudioTron default restrictions described in the previous section.

Search all folders in all shares: This option will search for music files in all shared folders on all networked PCs found by AudioTron. Note that in systems with many files in shared folders, this option could result in long search times when searching for new songs.

Search all shares in shared folders listed below: This option lets you see which shared folders have been detected by AudioTron and then enter those which should be searched for music files.

These options are selected on the web server **Share Search Options** screen, accessible by clicking on the option **“Click to Configure Share Search Options”** in the File Access Settings screen.

AudioTron Setup Utility Index Files

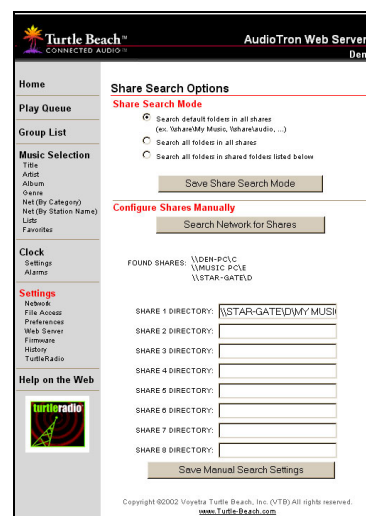
The Setup Utility can be used to automatically find folders with music files and place **“index files”** in those folders. When AudioTron finds index files during a music file search, it identifies the directory with the index file as a music directory and logs the music and playlists in the directory listings of the Configure Shares Manually section of the Shares Search Options screen. Note that these folders still must be shared in order to allow AudioTron to access its files.

To activate the Index File feature, run the Setup Utility main menu option called **“Check Local Computer for Music Files”** or **“Check Remote Computer for Music Files”**. On the **Search Results** screen that lists the directories for the PC searched, press the **“Fix it”** button to place index files in the directories where music files were found.

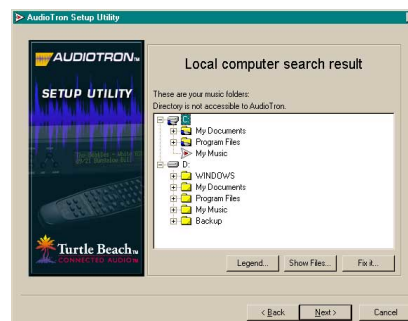
Directories with music accessible to AudioTron will be identified with the Play triangle . To remove the index files from all directories, run the Setup Utility **Advanced Options** and check **“Remove index files from local computer”**.



Web server **File Access Settings** screen



Web server **Shares Search Options** screen



Setup Utility directory search results

Troubleshooting Tips

➡ For an up to date list of troubleshooting questions and answers, please visit:
<http://www.turtle-beach.com/wb/audiotron/faq.htm>

Song Playback Issues

Song “skips” while playing

Under conditions of extremely heavy use, your network might be unable to provide an adequately sustained rate of digital audio data to AudioTron while playing music. For instance, if the music server PC is being used for high-overhead tasks (e.g. playing a PC game, accessing the Internet, transferring files, etc.) it could interfere with the task of sending music over the network. If this happens for a period of time that causes AudioTron’s internal music buffer to become empty, it is possible for the music to skip due to data loss. To reduce the possibility of this, try the following:

- ✓ Minimize usage of the music server PC while AudioTron is accessing music files stored there.
- ✓ De-fragment the hard drive of the host PC to minimize file transfer time.
- ✓ Use a dedicated PC for music storage so it will not be used for other tasks while playing music.
- ✓ Try a larger buffer threshold to allow more buffer to be filled before the music starts playing. See the Options Menu and web server sections to set the “**Prebuffer Threshold**”.
- ✓ WAV files use uncompressed data and therefore require as much as 10 times more data to travel over the network than do MP3 and WMA files. Also, WAV files can be used only with Ethernet networks. Try using MP3 or WMA to see if the skipping problem goes away.
- ✓ **If you’re running an HPNA network...** Be sure you do not have a line filter on the PC’s HPNA interface or the AudioTron’s HPNA connector. Also, if the PC has a modem, try connecting the HPNA interface and modem to the phone line with a splitter, rather than in series with each other.
- ✓ If only certain songs skip, try playing them on your PC with AudioStation to see if the song is damaged. If it skips on the PC, it will also skip on AudioTron. If the song is problematic, try re-recording the song from the original CD to make a new copy.
- ✓ As a last resort, power off AudioTron from the rear panel power switch, wait a few seconds and power it on again. This will rescan the music library and reset the AudioTron’s processor.

Pauses between songs

AudioTron eliminates pauses between tracks during playback, which preserves the natural playback of song medleys. AudioTron accomplishes this “gap-less” playback by buffering the currently playing song while simultaneously buffering the beginning of the next track in the Play Queue. Two things can interfere with this process, and create a delay between tracks:

- Unusually high network traffic, which could interrupt the data packet stream and prevent proper filling of the buffer.
- Songs that are less than 1 minute in length do not provide enough data to finish buffering the next song before the current song is over.

Note that if you’re listening to two songs that have zero silence between them on the original CD, you may hear a slight ‘pop’ as the AudioTron MP3 codec shuts down and then opens again for the next track. This pop does not occur with WAV files because no codec is used to decompress the audio stream. It will not occur in most songs, as they have a small buffer of silence at the beginning and/or end of the song.

Certain songs won't play at all, or display the message "CLOSED"

The "CLOSED" message indicates that the PC host has denied access to the music file, making it impossible for AudioTron to play the file. Some of the possible causes include:

- ✓ If the PC on which the file is stored is in "power save" mode, AudioTron will display "closed" until the PC is ready to transfer the file. This should only happen when the PC "wakes up" from the sleep state.
- ✓ Some MP3 and WMA files have odd sample rates that are incompatible with AudioTron. If the song was obtained from the Internet, it is possible that it was created in one of these non-standard rates and is not recognized by AudioTron. This is usually not a problem with songs created from a CD with AudioStation.

A song plays on the analog outputs but not on the S/PDIF digital output

- ✓ Songs will only play through the optical S/PDIF output if the digital audio file was stored using one of the standard S/PDIF sample rates of 32 kHz or 44.1 kHz. AudioTron does not support playback of uncompressed WAV files recorded with a sampling rate of 48 kHz. See the **"Product Specifications"** section in the Setup Guide for details on supported sample rates.
- ✓ When converting your CD collection to the PC hard drive in WAV format, set the recording rate to 44.1 kHz, which matches the sampling rate used on the CD. Re-sampling to a different rate usually results in decreased sound quality and may be incompatible with the S/PDIF output.
- ✓ Songs downloaded from the Internet from an unknown source may not have compatible S/PDIF sample rates and might only play out of the analog outputs.

Delay between the time the Play button is pressed and the time the music starts playing

- ✓ When you press the "Play" button, AudioTron first downloads a portion of the song file from the PC before it can start the music. Therefore, there will be a short delay caused by the digital file stream being transferred from the PC to the AudioTron. This is indicated by the message "Buffering" on the Display Panel when the track is first selected.
- ✓ Try changing the "Pre-buffer threshold" as described in the Options Menu and web server sections. A shorter threshold will cause the song to start playing sooner, but could result in audio dropouts in heavy network traffic situations.
- ✓ Because they are not compressed, WAV files require the transfer of more data into the buffer before playback can begin, and therefore will exhibit a longer delay than WMA and MP3 files.
- ✓ If the PC on which the song resides is in "energy-saving" mode and has been idle long enough for the hard drive to shut down, there will be an extra delay after pressing Play while the hard drive starts up and begins to access the song file. This will only occur on the first song.

Music Library Issues

AudioTron doesn't list some songs in the music library

- ✓ Use the Setup Utility to see which directories can be accessed by AudioTron. If you have music in directories that are listed as inaccessible, either move them to accessible directories or use the "Fix it" feature in the Setup Utility to place an index file into the directory so AudioTron will recognize it.
- ✓ Check the password setting on the shared directories. If you have a password set, then it must also be set on AudioTron.
- ✓ Check that "file and printer sharing" is enabled in the network control panel.
- ✓ AudioTron will list but won't play WMA music files with the "security" option set. Use AudioStation to see if the songs have been recorded in "secure mode".

- ✓ If the songs are stored on a Host PC running “firewall” software, it must be set to “pass” AudioTron’s IP address or it will be treated as an “unauthorized user” and be blocked from accessing the PC.

Some song titles appear twice in the display

- ✓ Two songs with different file names but the same Title tag information will be displayed as the same song twice (e.g. Song (1) Song (2)) because the tag information for “Title” is the same. The same applies to a song with the same title saved in different formats (e.g. WMA, MP3 or WAV).
- ✓ If, after checking your song library to confirm there’s only one version of the song, try re-setting AudioTron with the rear-panel power switch. This will reset the internal memory and cause it to re-scan the network for songs.
- ✓ Nested shares can also cause double-occurrences. For instance, if songs are stored in C:\My Documents\My Music and both the C: drive and \My Music are set as shared directories, the music files in \My Music might be displayed twice. The Setup Utility can check for this.

Internet Radio Issues

AudioTron has trouble connecting to Internet radio stations

Try pinging a web site by name and by IP address from the web server **Network Settings** page. If you are able to ping the web site by IP address, but not by name (i.e. you can ping 192.233.80.9, but not novell.com) then investigate your network DNS Server setup. If you are unable to ping a web site by IP, investigate your network gateway setup.

Internet radio stations play erratically

There are many things that can affect the quality of playback of an Internet radio station, some of which may be out of your control. If radio stations of similar bitrates play fine, it is most likely a problem with the station broadcasting. If stations of similar bitrate are also skipping, change your preferences at www.turtle-radio.com to only allow lower-quality streams. If the stream is only occasionally skipping, try pausing the stream for several seconds, then continuing.

A station plays on the analog outputs but not on the S/PDIF digital output

Stations will only play through the optical S/PDIF output if the digital audio stream uses one of the standard S/PDIF sample rates of 32 kHz or 44.1 kHz. The TurtleRadio web site lets you restrict station lists to those which support the S/PDIF sample rates.

Network Issues

General Network Troubleshooting Tips

- ✓ **Regardless of whether you're using HPNA or Ethernet, AudioTron requires a network that is running the TCP/IP protocol.** If your AudioTron isn't working, yet your network is running fine, it may be that the network is not set to use the TCP/IP protocol.
- ✓ **If your network has a DHCP ("Dynamic Host Control Protocol") Server...** An IP address can either be assigned to AudioTron automatically by one of the devices in the network (called a "DHCP Server"), or you can "hard code" an address into AudioTron (called "Static IP" addressing.) If your network has a DHCP server, AudioTron defaults to a setting whereby it will automatically accept an assigned IP address from a DHCP server.
- ✓ **If you're using a DSL or cable modem with a router/hub...** Many router/hubs (e.g. the Etherfast Cable/DSL Router from Linksys) also act as DHCP servers. Check with the manufacturer of the device to see if this is the case for your router/hub device. You should also check with the manufacturer to see if there's an update for the device's firmware.
- ✓ **File sharing...** AudioTron has special requirements for the directories in which your digital music files are stored. These directories must be called **Music, Audio\My Music** or **My Documents\My Music** and must be located *under* a shared directory. Simply *sharing* these directories will not allow AudioTron to find the music files. The Setup Utility can help you properly configure the directories on your PC. For a description of AudioTron's directory restrictions, see the section "**AudioTron and Shared Directories**".

AudioTron doesn't work with a specific Router or Hub

Some router/hubs need a firmware update to operate properly with AudioTron:

SMC Hub: Version 1.8x firmware works with AudioTron using Static IP addressing. It works intermittently as a DHCP server—sometimes AudioTron finds a host but no host name and it often cannot find files on shared PCs. The firmware update to 1.90 seems to correct the DHCP server and file share problems and can be found on the SMC web site: www.smc.com.

Linksys 4 Port Router/Hub: Version 1.35 firmware works with AudioTron using Static IP addressing and intermittently as a DHCP server. Sometimes it finds a host but no host name and it rarely can find files on shared PCs. The firmware update to v1.37 corrects this and is available on the Linksys web site www.Linksys.com.

If AudioTron is connected directly to your computer using an Ethernet or HPNA interface (Win98 and Win ME only)

- ✓ **Make sure TCP/IP is installed for your adapter:** Double-click on the "Network" icon in the Windows control panel. In the installed network component list box, search for "TCP/IP -> *your adapter name*". If TCP/IP is not installed, click on the "Add" button, select "Protocol", then click on "Add" again. Select "Microsoft" from the list box on the left and select "TCP/IP" from the list on the right. Click the "OK" button. Restart your computer if you were prompted to do so.
- ✓ **Make sure "Client for Microsoft Networks" is installed:** Double-click on the "Network" icon in the Windows control panel. In the installed network component list box, search for "Client for Microsoft Networks". If "Client for Microsoft Networks" is not installed, then click on the "Add" button, select "Client", then click on "Add" again. Select "Microsoft" from the list box on the left and select "Client for Microsoft Networks" from the list box on the right. Click the "OK" button. Restart your computer if you were prompted to do so.
- ✓ **Set up your adapter to use static IP addressing.** Double click on the "Network" icon in the Windows control panel, then select "TCP/IP -> *your adapter name*" component, and click on "Properties". In the "IP Address" tab, select "Specify an IP address" radio button, and type "192.168.0.1" as the IP address, and "255.255.255.0" as the subnet mask. In the "Bindings" tab, make sure "Client for Microsoft Networks" and "File and printer sharing for Microsoft

Networks” are checked. Click the “OK” button. Restart your computer if you were prompted to do so.

- ✓ In AudioTron options menu, disable DHCP, and set the IP address, and subnet mask as explained above.

AudioTron displays “No Hosts Found” when first turned on



The AudioTron web server “History” screen can be used to check many of the network settings. See the web server section for details.

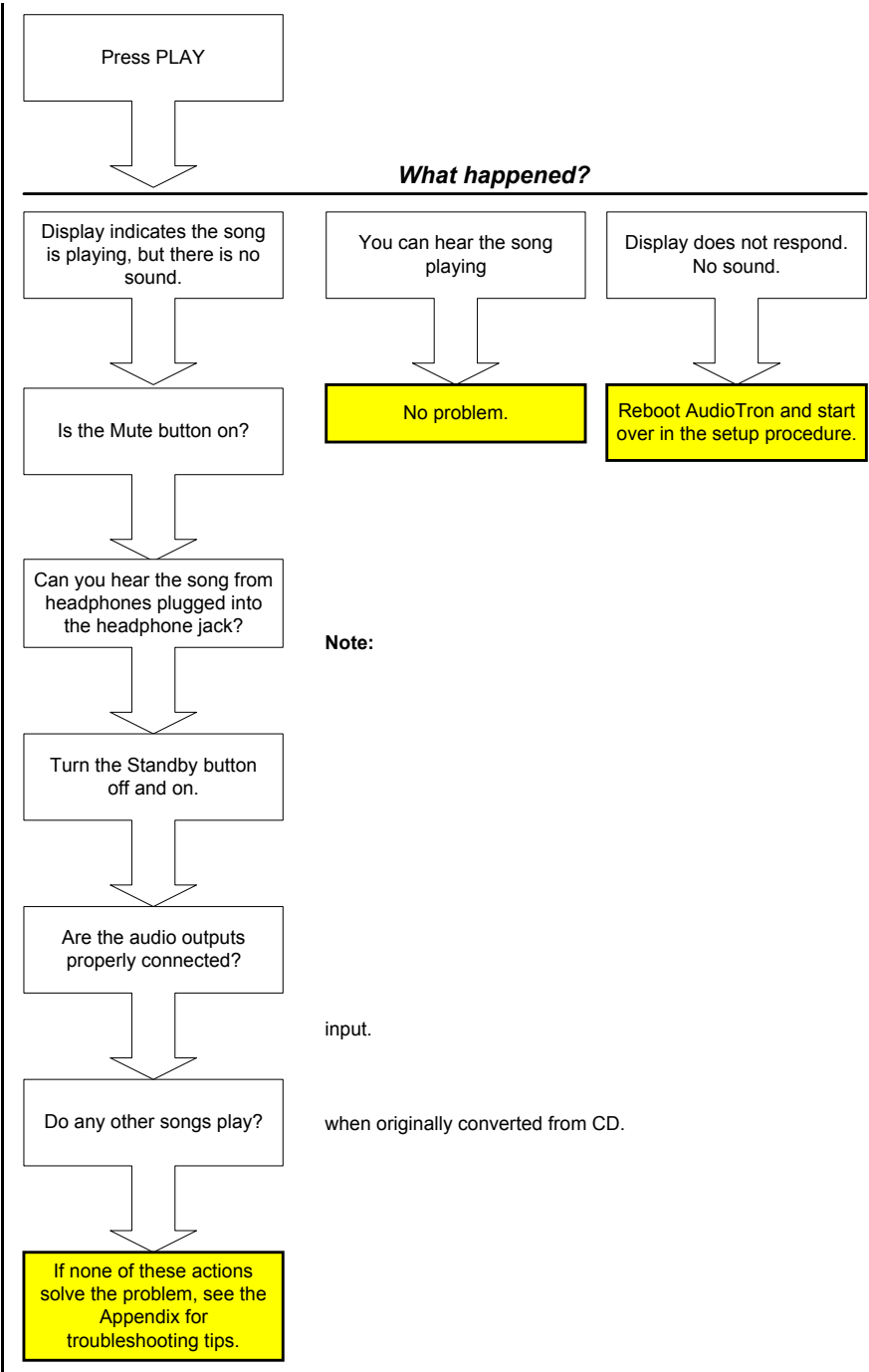
When powered up from the rear panel power switch, AudioTron will search the network for hosts after the Standby button is pressed. If AudioTron is in DHCP mode and does not find a host after searching for two minutes, it will display “**No Hosts Found**”. If this occurs, check the following:

- ✓ Reconnect the network cable to make sure it “clicks” when inserted.
- ✓ Try another network cable to make sure the problem is not due to a defective cable.
- ✓ If AudioTron is connected to a hub, try another hub.
- ✓ Make sure the host PC is powered on.
- ✓ If you’re using DHCP, make sure that only one computer is configured as a DHCP server. If you are using a “smart” hub that acts as a DHCP server, make sure that none of the host computers are configured as DHCP servers.
- ✓ Try re-setting your cable/DSL router so it re-scans the network for new nodes.
- ✓ If you’re using Static IP, use the AudioTron Setup Utility to check that AudioTron’s IP address settings don’t conflict with another PC or another AudioTron on the network.
- ✓ If your PC is running “firewall” software, it should be configured to pass AudioTron’s IP address. Check the software manufacturer’s instructions on how to set this.
- ✓ If you’re using a 4-port LinkSys Etherfast Cable/DSL router, check that the firmware is version 1.37 or higher. Firmware versions lower than 1.37 may have a problem providing DHCP and IP address access to AudioTron if the Linksys is used as a hub for your network.

If you’re using an HPNA network

- ✓ Make sure AudioTron is connected to the same phone line as your HPNA network. Try hooking up two phones to the jacks you’re using for AudioTron and an HPNA-connected PC. If you can’t talk on the two phones using the same jacks and cables, then the HPNA network won’t be able to communicate between the PC and AudioTron.
- ✓ If you have DSL service, make sure the DSL line filter is not between AudioTron or your PC’s HPNA interface or it could affect the HPNA network signals and cause performance problems.
- ✓ Do not connect a telephone line filter between AudioTron’s HPNA jack and the wall phone jack. Transient protection is built into the AudioTron phone jack.

Audio Troubleshooting Procedure



Updating AudioTron's Firmware

Turtle Beach periodically releases new updates for the AudioTron firmware to implement feature enhancements, bug fixes, and operational modifications. The firmware updates may be obtained at the Turtle Beach web site (www.Turtle-Beach.com) and transferred to the AudioTron either from the web server or from the front panel display, as described in this section. The firmware version number in your AudioTron can be found as follows:

- The firmware version is displayed on the front panel whenever AudioTron is powered on from the rear panel AC power switch.
- The firmware version is displayed on the front panel when the Options button is pressed.
- The firmware version is displayed in the web server Firmware Settings screen.

CAUTION:



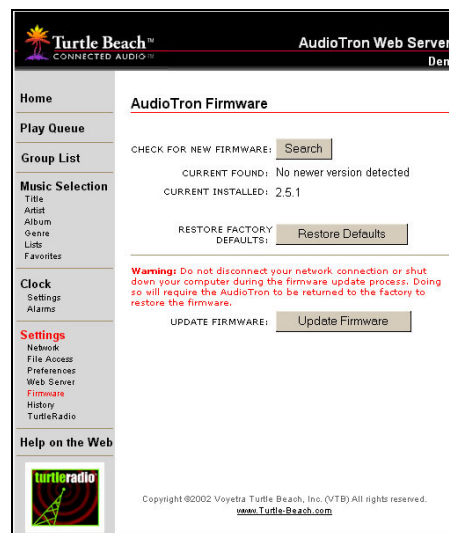
Do not turn off AudioTron's AC power or disconnect its network connection before the firmware download is completed! Removing the power while the firmware is being transferred to AudioTron from the PC could cause the AudioTron "boot loader" to be inadvertently deleted and will render the unit inoperable. If this occurs, AudioTron will no longer start up and will require factory service to reload the firmware.

To update the firmware from the web server

1. Launch the AudioTron web server, per the instructions in the Web Server section of this manual. Click on the **Settings Firmware** menu option to activate the **Firmware** screen.
2. Note the **Current Installed** version, which indicates the version number of the firmware installed in the AudioTron.
3. Check for firmware updates at the Turtle Beach web site. If the version number posted at the Turtle Beach web site is higher than the version number displayed in the Current Installed Version, download the firmware file from the web site. Unzip the file to any subdirectory that contains shared music files (e.g. My Music, Audio, Music) so that AudioTron can find the firmware file.



*AudioTron firmware files have a .nb0 extension and are typically formatted with a name such as **atron20122.nb0**, which represents firmware version **2.01.22**.*



Web server **Firmware** screen

4. On the **Firmware** screen, click on the **Search** button to begin a search for the firmware file. After the search is completed, check if **Current Found:** indicates that the version number found during the network search matches the version number downloaded from the Turtle Beach web site. If not, then make sure the file was copied to a directory accessible to AudioTron (e.g. a directory used for storing music library files), then try the search again.
5. If the **Current Found** version is newer than the **Current Installed** version (i.e. a higher number), then click the **Update Firmware** button and wait for the updating process to complete (AudioTron's display should indicate that the firmware is being updated.)
6. After the firmware update is completed, the AudioTron display reads "**Please power cycle to activate**". Turn the back panel power switch off then back on, to reset AudioTron.
7. Check if the firmware version number has been updated from the original setting either by noting the version number displayed on start-up, or by checking the web server home screen as described above. Note that the new version number will not be displayed until AudioTron is reset.

To update AudioTron's firmware from the front panel

1. Press the Options button to display the version number of the firmware. The display will look similar to the following illustration, with the firmware version number shown on the top row.
2. Check for firmware updates at the Turtle Beach web site. If the version number posted at the Turtle Beach web site is higher than the version number displayed in step 1, download the firmware file from the web site. Unzip the file to a subdirectory that contains your shared music files (e.g. My Music, Audio, Music) so that AudioTron can find the file.



*AudioTron firmware files have a .Nb0 extension and are typically formatted with a name such as **atron20122.nb0**, which represents firmware **version 2.01.22**.*

3. If the Options LED is not lit, press the Options button. Turn and press the knob to select the **"Update Firmware"** option. Turn and press the knob to select **"Yes"**.
4. Once AudioTron finds the firmware file, it will transfer the file from your PC to the internal FLASH RAM, as noted on the display. A successful transfer will display the messages "ERASING", "PROGRAMMING" and "VERIFYING". The new version number will not be displayed until AudioTron is reset, as described below.
5. If these messages are not displayed, it indicates that AudioTron did not find the firmware file and the update did not occur. In this case, check that the firmware file is located in a shared directory that is accessible to AudioTron (such as a directory with music files that have been known to operate with AudioTron.) Once the file location is confirmed, try re-setting AudioTron from the rear-panel power switch to initiate a full network rescan and repeat the update procedure from step 4 above.
6. After the firmware update is completed, the AudioTron display reads **"Please power cycle to activate"**. Reset AudioTron with the rear panel power switch.
7. Check if the firmware version number has been updated from the original setting either by noting the version number displayed on start-up, or by checking the web server home screen as described above. Note that the new version number will not be displayed until AudioTron is reset.

Select Option - Version 2.0.0 Update Flash

Network Basics

Many books have been written about the subject of networking. Therefore, this section is only intended to provide a brief overview of how AudioTron works in a home network environment and covers only those issues essential to setting up a proper network for using AudioTron.

Overview of Home Networks

A Home Network lets you transfer files between PCs as well as share hardware (e.g. printers, scanners, etc.) and Internet connections among several users. If you don't have a network, you can set one up with a network starter kit, which typically includes all of the hardware and software you'll need for a small network. Be sure to get a kit that supports the Windows Plug and Play (PnP) standard, which makes it easier to install the driver software.

The rate at which data is transferred on a network is measured in Megabits per second ("Mb/s"). The higher the data transfer rate, or Mbs, the faster data will be transferred between devices on the network.

Many different types of network standards have been developed, some of which are more widely accepted than others. Each standard uses different types of connections and protocols (the language of networks) to communicate between devices. AudioTron is compatible with Ethernet or HPNA (Home Phone Line) network technologies and the TCP/IP protocol. Wireless and power line networks are not compatible with AudioTron.

HPNA (Home Phone Network Alliance) Networks

An **HPNA** network uses standard analog phone lines, so in most cases you won't have to add wiring to your home. There are two versions of HPNA:

- **HPNA 1.0** transfers data at a maximum rate of 1 Mb/s
- **HPNA 2.0** operates at rates up to 10 Mb/s.

AudioTron is designed to work with HPNA 2.0, and will not work reliably on HPNA 1.0.

An HPNA network does not affect your phone line or Internet connection. You can transfer data on the network and make phone calls at the same time, even though the network and your phones are using the same wires. HPNA is incompatible with digital phone lines that are sometimes used with multi-line phone systems. To find out more about HPNA visit <http://www.homepna.org>.

Ethernet Networks

Ethernet is a well-established networking standard, so it has a wide variety of components that are relatively inexpensive. Like HPNA, there are two types of Ethernet:

- **Regular Ethernet** (referred to as 10BaseT) runs at 10Mb/s.
- **Fast Ethernet** (referred to as 100BaseTX) runs at 100Mb/s.

AudioTron is compatible with 10BaseT Ethernet and is incompatible with networks that can run only 100BaseTX Ethernet. Ethernet networks that automatically switch between these two speeds (referred to as "10/100BaseT") are also compatible with AudioTron since they support both data rates.

Ethernet requires special cable (called "CAT-5" or "CAT-5e") used exclusively for transmitting the Ethernet signals between devices. When connecting Ethernet devices together, you'll need an Ethernet "Hub", which distributes the Ethernet signal between multiple devices and controls the network "traffic". There are many types of hubs available, and some have enhanced features, such as built-in switches that intelligently route data in the network to optimize transfer speeds.

Many computer stores have inexpensive hubs and CAT-5 cables in fixed lengths with connectors already mounted on each side, making it relatively easy to wire an Ethernet network in your home.

HPNA vs. Ethernet for AudioTron

Although increased speed of an Ethernet network is not necessary for operating your AudioTron (except in the case of WAV file playback), it does improve file transfer speed between PCs in your network. If you don't mind wiring your home with CAT-5 cable, you can enjoy the benefits of faster data transfer offered by Ethernet networking. If you cannot wire your home with CAT-5 cables, HPNA 2.0 provides an easy way to set up an adequate network that is compatible with AudioTron. The only drawback over an Ethernet network is HPNA's inability to handle WAV file playback on AudioTron. Playback of MP3 and Windows Media (WMA) compressed formats will not be restricted.

Setting up either type of network will require a Network Interface Card (NIC), which is available from several manufacturers as cards that install inside your PC, or external network adapters that connect to a USB (Universal Serial Bus) port.

Network Terminology

TCP/IP Network Protocol

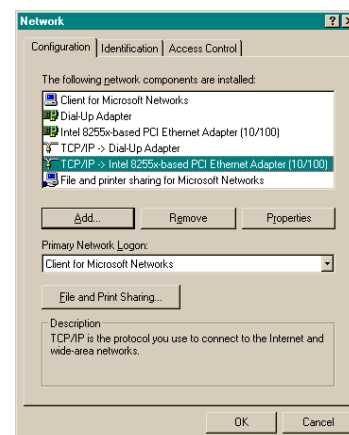
The "language" used to transfer data between devices in a network is called the "network protocol" and includes acronyms such as TCP/IP, IPX/SPX and NetBEUI. AudioTron uses **TCP/IP (Transmission Control Protocol/Internet Protocol)** to communicate over a network, therefore your network must be set up to use TCP/IP for compatibility with AudioTron.



The AudioTron Setup Utility can be used to check if your network is running TCP/IP. See the Setup Utility section in this manual for details.

To check if your network is running TCP/IP in Windows 98

1. Launch the Control Panel by clicking **Start → Settings → Control Panel**. Double click on the **Network** icon to launch the **Windows Network** screen.
2. In the Network Dialog, click on the listing for your Ethernet or HPNA network interface card (NIC). Then, click on Properties and in the Bindings Tab, check that TCP/IP and File Sharing are enabled.
3. If TCP/IP is not installed, refer to the Windows Help for instructions on how to set up the network with TCP/IP.



"Windows Network" screen

IP (Internet Protocol) Addresses and Sub-net Mask

Each device connected to the network (PCs AudioTrons, etc.) is referred to as a "node" and each node is identified by a unique **IP Address**. The IP address is determined in part by a **sub-net mask** number that is used to derive the address of the entire network.

An IP address can be thought of as the "phone number" of each node (i.e. device) on the network. Within the same area code, no two people have the same phone number. If two calls are made to the same number at the same time, both callers will get a busy signal and no communication can take place. Similarly, with IP addresses each computer and each AudioTron on the network is regarded as a node that must each have a unique **IP address** ("phone number"). The network must also have its own "area code", which is derived from its **Sub-net Mask**.



The AudioTron Setup Utility can find the IP address settings for the AudioTrons and PCs on your network.

Setting up AudioTron's IP Address

The AudioTron Setup Utility can help you set up AudioTron's IP address, found on the web server's **Connectivity** tab. An IP address can be assigned manually, which is called "**Static IP Addressing**", or automatically by a "**DHCP Server**", which is a PC or other device on the network that manages IP addresses for all nodes. The Setup Utility can determine if a DHCP server is available on your network, or if AudioTron requires a Static IP address.

DHCP (Dynamic Host Client Protocol) Server

The easiest way for a device to get an IP address is to have it automatically assigned one by another device, such as a PC or router, so you don't have to do it manually. If you're using a cable modem or DSL, the cable/DSL routers typically act as DHCP servers. You can also configure a PC as a DHCP server, as described in any good home networking manual.



If you have a Cable/DSL router installed on your network, use the Cable/DSL router box as the DHCP server, not a PC. A network cannot have more than one DHCP server.

Gateway and DNS Server

In order to provide the Internet radio function, AudioTron must be able to access the Internet on your network. If your network is configured for "**Internet Connection Sharing**", the device that provides a connection between the network and the Internet connection (i.e. dial-up, DSL or cable modem) is called a "**gateway**". The gateway is connected to another device called a "**DNS Server**" that determines the connection between a URL (Universal Resource Locator) such as www.TurtleRadio.com, and the IP address for that URL. Thus, when AudioTron plays Internet radio stations, the gateway provides AudioTron a link to the Internet from the network and the DNS Server finds the location of the stations based in AudioTron's station list.



The Setup Utility can find IP addresses for the gateway and DNS devices on your network.

Routers and Internet Connection Sharing

A "**router**" is a network device that forwards or "routes" TCP/IP data between your network and the Internet. Routers are typically separate boxes that connect to your network and the Internet. However, Windows 98 S/E (and higher) provides a feature called "**Internet Connection Sharing**" ("ICS") which lets a PC connected to the Internet act as a simple router and DHCP server. On the Internet side of a router, all of the TCP/IP data seems to be going to a single IP address, while on the network side, the router distributes the data to each node on the network, each with a distinct IP address.

Using ICS on a PC can be a daunting task because if something goes wrong, there is little user interface to help you troubleshoot. Also, if the ICS PC host crashes, every PC and AudioTron on the network will lose its Internet connection. Sharing a cable or DSL modem on an ICS host PC will also require two Ethernet adapters in the PC, and figuring out which one is connected can be complicated. For this reason, it's much easier to set up a separate hardware router on your network.

Firewalls

A Firewall is "security" software that keeps outsiders from breaking into your network. Firewalls are primarily used to prevent "hackers" from accessing your PC hard drive while you're on the Internet. The greatest risk of this is when the IP address for your Internet connection is static, such as when using a DSL or cable modem. Since these devices typically maintain the same IP address to the outside world, and are always on, they make it easier for hackers to return to the same address until they've figured out a way to "break in". For this reason, a firewall is typically used between the DSL or cable modem to prevent unauthorized users from accessing your network from the outside.



If a firewall is running on a network PC that contains music for AudioTron, the firewall should be set to pass AudioTron's IP address. Otherwise, it will treat AudioTron as an "unauthorized

user" and prevent it from accessing music files in the PC's Shared directories. To do this, follow the instructions supplied with your firewall product.

Passwords

AudioTron uses two kinds of passwords, which can be set via the web server: One is for protecting "shared directories" on Windows 98/Me and the other is used in conjunction with a network running on Windows NT, XP or 2000.

AudioTron can save only one password, so you can only use a single password to protect all your shared music directories in Windows 98/Me. When password protecting your shared directories, set the password in the AudioTron web server Options "Share Password" setting.

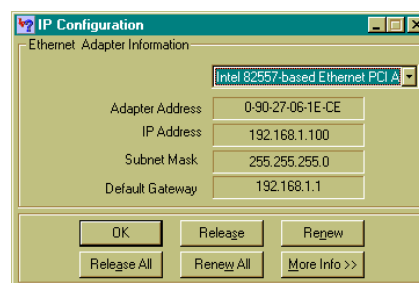
AudioTron also requires a password if your music server is running Windows NT, XP or 2000. These Network Operating Systems treat all devices accessing the PC as a "User". Each user requires a user name and user password, so AudioTron will need one as well. The user names and passwords set in the Windows Network Control Panel for the music server PC should match those in AudioTron's web server **File Access** page.

➡ *Passwords are case sensitive! The password "MYPASS" is a different password than "MyPass" or "mypass".*

Checking Network settings with "Winipcfg.exe"

Windows 98 includes a network diagnostic program called **Winipcfg.exe** which may be run from the Windows "Start" menu ("Start → Run → Winipcfg"). This program may be used to find the IP Address, Subnet Mask, and other relevant TCP/IP settings for each PC on your network.

When the dialog box appears, click on the "pull down" menu to select your network interface card (in this case an Intel 82557-based Ethernet PCI card). Then note the IP Address, Subnet Mask and Default Gateway settings. The IP address setting for AudioTron should not conflict with the IP addresses for any of the PCs on your network. The Subnet Mask and Default Gateway settings on AudioTron should match the settings on your network PCs.



Winipcfg screen

If your network is running a DHCP server, the IP addresses will be assigned by the DHCP server. You can reassign the IP address by pressing the Release All button, followed by Renew All. Typically, this would be done on each PC when you add a new PC to the network. More information on this procedure can be found in the Windows Help file, or in a Windows reference manual.

In Windows NT, XP and 2000, the utility IPCONFIG.EXE may be run from the DOS prompt to obtain the IP configuration settings.

➡ *Note that the AudioTron Setup Utility can also provide most of the information for your network settings.*

Setting AudioTron's IP Address

To assign an IP address with a DHCP Server (on HPNA or Ethernet)

1. Plug AudioTron into the HPNA or Ethernet network connection and make sure the PCs and network hubs are all turned on.
2. Turn on AudioTron from the rear panel power switch, wait a few seconds, then press the front panel Standby button. When powering on, AudioTron will automatically detect if it is connected to the network through an HPNA or Ethernet interface and choose the appropriate interface.
3. When the display indicates the type of network connection detected (Ethernet or HPNA), make sure it corresponds to the type of network you're using. For instance, if you connected an Ethernet cable and AudioTron's display indicates it has detected HPNA, the cable is either not connected properly or the Ethernet network may not be operating properly.
4. Once AudioTron detects the network connection, it will begin searching the network for a DHCP server and may display "**Waiting for Network**". This could take up to 120 seconds, so wait until it's done.
5. If AudioTron finds the DHCP server and it assigns AudioTron an IP address, it will display "**Searching for Hosts**" and search for all of the host PCs on the network.
6. If AudioTron finds music files on any of the PC hosts, it will display "**Found xx Hosts**" (where xx is the number of PCs it found) and search for music files. After it's done finding songs, the main menu will appear and AudioTron will be ready to play music. From this point on, you should turn AudioTron on and off with the Standby button. Turning off the rear panel power switch will erase the internal database of song titles and the network scan procedure will be repeated the next time AudioTron is powered on.
7. If "**No Hosts Found**" is displayed, check the suggestions for "**No Hosts Found**" in the **Troubleshooting Tips** section. If, after rebooting AudioTron "**No Hosts Found**" is again displayed, restore AudioTron's default settings as described below.

To restore AudioTron's default settings

1. Press the **Options** button. Turn the knob until the "**Restore Factory Defaults**" is displayed.
2. Press the knob to display the "**No/Yes**" menu screen. Turn and press the Knob to select "**Yes**" to restore the factory default settings.
3. Reboot AudioTron to repeat the DHCP process.
4. If "**No Hosts Found**" is again displayed, it is possible that your network does not have a DHCP server (or if it does, AudioTron can't find it.) In this case, you must manually assign an IP address using the Static IP address procedure as described below. You can check for a DHCP server on the network by running the Setup Utility.

To assign a Static IP Address from the front panel

1. **Find the addresses of the PCs in your network:** Run the Setup Utility from the AudioTron CD to find the IP address, Subnet IP Mask and gateway address for each PC in your network. These numbers will be used in a later step.
2. **Choose an IP address that doesn't conflict with the IP Addresses of the PCs in your network:** Choose an IP address for AudioTron that won't conflict with any of the IP addresses you found in Step 1. For example, if there are two PCs with the first set to IP address 192.168.0.1 and the second set to 192.168.0.2, then choose a number for AudioTron that's at least 10 higher than the highest IP address already assigned. (e.g. 192.168.0.12 in this example). Choosing a number that's significantly higher than any of the other IP Addresses (but no higher than 254) will help assure that AudioTron won't conflict with other IP Addresses.
3. **Select the network type (Ethernet or HPNA):** Press the **Options** button on the AudioTron front panel and turn the knob to display "**Select Network Interface**". Press the knob to select, then turn and press the knob to set the network interface as either **Ethernet** or Phone Line **HPNA**, so that it matches your network installation.

4. **Disable DHCP:** Press the **Options** button on the AudioTron front panel and turn the knob to display **"Configure DHCP"**. Press the knob to select, then turn and press the knob to **"disable"** DHCP. Note that disabling DHCP will cause AudioTron to ignore the IP address, Subnet Mask and Gateway Settings assigned by a DHCP server.
5. **Set the IP Address:** Press the **Options** button on the AudioTron front panel and turn the knob to display **"Configure IP Address"**. Press the knob to select, then turn and press the knob to enter the **IP address, subnet mask, gateway and DNS server** settings obtained from the Setup Utility.
6. **Set the "Sharing" Password (Optional):** If you have password-protected your Shared directories, go to the web server **File Access** page and enter the password in the **"Windows 98/Millennium Share Password"** setting. Then press **"Save Share Password"**. This will enable AudioTron to access the shared directories. ***Note that passwords are case sensitive.***
7. **Set the NT/2000/XP User Name and Password (NT/XP and Win2K only):** If you're running an NT 4, XP or Win 2000 network, the NT User Name and Password should match those set in AudioTron. In the web server **File Access** page, enter the password for NT/XP/2K and click on the **"Save NT/2000/XP Settings"** button. ***Note that passwords and user names are case sensitive.***

Regulatory Compliance Information

For United States users: FCC Part 15

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Declaration of conformity

Responsible party: Voyetra Turtle Beach, Inc. 5 Odell Plaza, Yonkers, NY 10701 (914) 966-0600 Fax: (914) 966-1102 www.turtle-beach.com

Product: AudioTron Digital Music Player

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

Caution

Changes or modifications not expressly approved by Voyetra Turtle Beach could void the FCC compliance and negate your authority to operate the product.

For United States users: FCC part 68

The AudioTron HPNA interface complies with Part 68 of the Federal Communications Commission (FCC) rules. On the HPNA interface card is a label that contains the FCC registration number and Ringer Equivalence Number (REN) for this device. If requested, this information must be provided to the telephone company. An FCC-compliant telephone line cord with a modular plug is required for use with this device. The HPNA interface is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68-compliant. See installation instructions for details.

The Ringer Equivalence Number (REN) is used to determine the number of devices which may be connected to the telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most areas, the sum of RENs should not exceed five (5). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. If this device causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. The telephone company may request that you disconnect the equipment until the problem is resolved. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of this equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

Connection of the phone line interface to a party line service is subject to state tariffs. Contact the appropriate state public utility commission, public service commission or corporation commission for information.

For Canadian users: ICES-003

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par Industrie Canada.

DOC notice (for products fitted with an IC-compliant modem)

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operation, and safety requirements. The Department does not guarantee the equipment will operate to the users' satisfaction. Before installing this equipment, users should make sure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should make sure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five (5).

Warning!

- To avoid electrical shock or equipment malfunction do not attempt to make electrical ground connections by yourself. Contact the appropriate inspection authority or an electrician, as appropriate.
- To reduce the risk of fire, use only No. 26 AWG or larger telecommunications line cord.