

**SIMPLWINDOWS
NAME:**

Turtle Beach AudioTron

CATEGORY:

Transport Decks

VERSION:

1.0

SUMMARY:

Provides a TCP/IP interface to a Turtle Beach AudioTron Digital Music and Internet Radio Player

GENERAL NOTES:

This module will control a Turtle Beach AudioTron.
The following controls are provided:

Transport controls - Play, Stop, Pause, Random, Repeat,
etc.

Volume Up/Down/Mute

Power On/Off

Play Queue Viewing, clearing, and track selection

Database browsing by Artist, Album, Track, Genre,

Playlists,

Internet Radio, and Favorites

Searching by letter

Communications with the AudioTron are via TCP/IP
using a TCP/IP Client at port 80d on the Crestron
system.

You will need to enter the IP address of the Audiotron
on the IP_Address\$ input of this module. This can be
done using a Serial Send symbol connected to the
IP_Address\$ input of the module. Put a 1 on the input of
the Serial Send symbol.

If you have enabled a password on the Web Server
page of the AudioTron web interface, you will need to
enter a User Name and Password into this module. As
with the IP Address, use Serial Send symbols for both
the User Name and Password. Remember that they are
case sensitive.

You will need to establish the TCP/IP Connection
between the Crestron system and the AudioTron before
using any of the functions of this module. See the demo
program for an example of how to establish the
connection.

After establishing the connection, the first thing you
must do is pulse the Request_Database_Information
input. This will allow the Crestron system to synch up
with the information stored on the AudioTron.

Next, you can assert the Poll_Enable input. As long as
this input is held high, the AudioTron will be polled for
it's status every three seconds. This will allow all the
feedback of this module to function properly.

You can browse for music by first pulsing one of the
Browse_* inputs. This will request a list of whichever
category was selected to be displayed at the Browse_*
outputs of this module.

If you choose to browse by Artist, Album, Track, or
Genre, you will be able to further refine your search by
pulsing one of the Deeper_* inputs. For example, if you
select Browse_Artists, you will then be able to select
Deeper_Albums, Deeper_Tracks, or Deeper_Genres for
any of the entries returned. You can continue refining
you search until you have tracks displayed. At any point
in the search, you can select one (or more) of the
entries returned, and either add those selections to the

Play Queue (using the Add_To_Play_Queue input), or you can play them immediately (using the Play_Now) input. Using the Play_Now input will clear the current Play Queue, add your selection to the Queue, and start playing.

If you select to browse by playlists, streams, or favorites, you will be able to select any entry (or entries) from the list, and either add them to the Play Queue, or play them immediately (as above).

When Browsing by favorites, Browse_First, Browse_Previous, Browse_Next, Browse_Last, are all valid. When browsing by Artist, Album, Tracks, Genre, Streams, or Playlists, only the Browse_First and Browse_Next functions are valid.

When browsing by any category, you can always search for items starting with the first letter you specify using the Search_* inputs. This will cause whatever browse list is selected to scroll to entries starting with the letter you select.

You can also view and scroll through the Play Queue. Selecting any of the entries in the play queue will cause that selection to play immediately. Clearing the Play Queue will remove all selections from the queue.

Note that depending on what functions the AudioTron is executing, there may be a delay of up to several seconds between when you activate a function on this module, and when you see the results reported back from this module.

Also note that you can specify how many entries are returned per page for both browsing and for the Play Queue, using the two parameter fields. Valid entries for these fields are values between 1d and 10d, so you can display between one and ten lines per page.

**CRESTRON
HARDWARE
REQUIRED:**

CNMSX with ENET+
Any 2-Series processor with an ethernet port

**SETUP OF CRESTRON
HARDWARE:**

Use TCP/IP Client at Port 80d

Set up the IP table to point to whatever IP address the AudioTron has been set to.

VENDOR FIRMWARE:

3.0.27 or later

VENDOR SETUP:

Verify if a password has been enabled on the Web Server screen of the AudioTron's web interface. If so, you will need to enter the user name and password into this module using Serial Send symbols. If not, you can place 0's on the User_Name\$ and Password\$ inputs. The AudioTron must have a static IP address assigned to it. You must use a Serial Send symbol attached to the IP_Address\$ input of this module to tell the module the IP address.

CABLE NUMBER:

None

CONTROL:

IP_Address\$

S

Use a Serial Send to enter the IP Address of the AudioTron

| | | |
|--|---|--|
| User_Name\$ | S | Use a Serial Send to enter the user name of the AudioTron web server (if used) |
| Password\$ | S | Use a Serial Send to enter the password of the AudioTron web server (if used) |
| Request_Database_Info | D | Pulse to request global AudioTron database information. |
| Power_On/Off | D | Pulse to power the AudioTron on/off |
| PLay/Stop/Pause/Prev/Next | D | Pulse to control playback functions |
| Random/On/Off | D | Pulse to activate/deactivate random mode |
| Repeat/On/Off | D | Pulse to activate/deactivate repeat mode |
| Volume_Up/Down/Mute | D | Press and hold to ramp the volume up/down |
| Play_Queue_First/Prev/Next/Last | D | Pulse to scroll through pages of entries in the play queue |
| Play_Queue_Select_1-10 | D | Pulse to select an entry in the play queue for immediate playback |
| Play_Queue_Clear | D | Pulse to clear all entries out of the play queue |
| Browse_* | D | Pulse to select which type of information for which to browse |
| Browse_First/Prev/Next/Last | D | Pulse to scroll through pages of browse entries |
| Browse_Select_1-10 | D | Pulse to select one (or more) entries while browsing |
| Play_Now | D | Pulse to play the currently selected browse entry immediately |
| Add_To_Queue | D | Pulse to add the currently selected browse entry to the end of the play queue |
| Deeper_Artists_* | D | Pulse to refine a currently active browse entry by seeing related artists |
| Deeper_Albums_* | D | Pulse to refine a currently active browse entry by seeing related albums |
| Deeper_Tracks_* | D | Pulse to refine a currently active browse entry by seeing related tracks |
| Deeper_Genres_* | D | Pulse to refine a currently active browse entry by seeing related genres |
| Search_* | D | Pulse to scroll a currently active browselist to the letter you select |
| Poll_Enable | D | Assert to enable polling of the AudioTron. Typically, this input should be high if the TCP/IP connection is active, and an AudioTron page is being displayed on the touch panel. |
| From_Device\$ | S | Serial signal to be routed from the TCP/IP Client object |

FEEDBACK:

| | | |
|---------------------------------|---|---|
| Current_Album\$ | S | Indicates the name of the currently playing album |
| Current-Artist\$ | S | Indicates the name of the currently playing artist |
| Current_Track\$ | D | Indicates the name of the currently playing track |
| Current_Genre\$ | D | Indicates the name of the currently playing genre |
| Status\$ | A | Indicates the status of playback (playing, buffering, etc.) |
| Current_Time | A | Indicates the elapsed time of the currently playing selection |
| Total_Time | D | Indicates the total time of the currently playing selection |
| Play/Stop/Pause_fb | S | True feedback indicating the current transport state |
| Random_Fb | S | True feedback indicating the state of random |
| Repeat_Fb | S | True feedback indicating the state of repeat |
| Volume_bar | D | True feedback indicating the relative volume level |
| Mute_fb | D | True feedback indicating the current state of mute |
| Current_Play_Queue_Track | A | Indicates the number of the currently playing track in the play queue |
| Total_Play_Queue_Tracks | A | Indicates the total number of tracks in the play queue |
| Play_Queue_1-10\$ | D | Indicates a current page of titles in the play queue |
| Browse_*_Fb | S | Indicates which browse mode has been selected |
| Browse_Select_1-10_Fb | S | Indicates which browse selection(s) have been selected |
| Browse_1-10\$ | S | Indicates a current page of titles in the browse selection |
| Deeper_Artist_Valid | S | Indicates if it is currently valid to browse deeper by artist |
| Deeper_Album_Valid | S | Indicates if it is currently valid to browse deeper by album |
| Deeper_track_Valid | S | Indicates if it is currently valid to browse deeper by track |
| Deeper_Genre_Valid | S | Indicates if it is currently valid to browse deeper by genre |
| To_Device\$ | S | Serial signal to be routed to a TCP/IP Client object |

OPS USED FOR TESTING: v3.015.cuz
COMPILER USED FOR TESTING: SimplWindows Ver 2.03.18
SAMPLE PROGRAM: Turtle Beach AudioTron Demo

REVISION HISTORY:

None