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CasaTunes Getting Started Guide

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CasaTunes

Multi-Room Music Server

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Getting Started Guide

Thank you for your interest in CasaTunes. The purpose of this guide is to take you step-by-step through the CasaTunes installation. These steps include:

1. Determining your configuration setup
2. Completing your CasaTunes worksheets
3. Setting up your hardware for CasaTunes
4. Installing the CasaTunes software
5. Configuring your CasaTunes software

Determining your configuration setup

Before proceeding to use CasaTunes, you need to decide which PC you are going to install the CasaTunes Multi-Room Music Server on. This guide assumes your multi-room music system is already installed.

In order for CasaTunes to function correctly, you must connect the audio outputs from your music server to the source inputs on your music system, and you must also setup a serial connection from your music server to your music system in order for CasaTunes to be able to control your music system.

There are two different installation options to choose from.

Option 1

You can physically locate your CasaTunes Music Server PC next to your multi-room music system. With this option you must connect the outputs from your sound card to the source inputs on your music system. If you are using a sound card that supports more than one stereo output, you can connect each of these stereo outputs to a different input source on your music system.

Your CasaTunes Music Server PC will also need to have at least one serial port (sometimes referred to as a COM or RS232 port). You must connect a serial cable from the serial port on the PC to the serial port on the music system. The serial port on your music system is typically located on the rear of the device.

Option 2

You can use one or more Barix Exstreamer devices, or networked music players with CasaTunes. The advantage of using these devices is it allows you to use any PC in your home as your CasaTunes music server, and you do not have to physically locate the PC next to your music system.

To connect the audio and serial control to your music system, you only have to locate the small Exstreamer devices next to your music system, and hook the audio stereo outputs and serial connection on the Exstreamer device to your

music system. You will need one Exstreamer device for each input source on your music system. Since these Exstreamer devices are networked devices, they will need access to a network connection.

Regardless of the option you choose, the machine you select to use as your CasaTunes Multi-Room Music Server PC does not have to be dedicated to CasaTunes and can be used to run other applications. For example, the machine could be a Windows Media Center PC that is used as your Home Theater PC (HTPC), or it could be the PC in your home office, etc.

☞ If you are using a Nuvo Technologies tuner, you will need an additional serial port connection for each tuner.

Your CasaTunes Multi-Room Music Server software supports the following Microsoft operating systems:

- Windows XP Professional
- Windows XP Media Center Edition
- Windows Vista Home Premium
- Windows Vista Business
- Windows Vista Ultimate

Completing your CasaTunes worksheets

To simplify the installation and to document your setup, we strongly recommend completing your CasaTunes worksheets. A blank worksheet is available as Appendix A. An example of a completed worksheet is shown as Appendix B.

Complete the following information on the worksheet:

1. The type of multi-room system being used.
2. The type of serial port you are going to use to control your multi-room music system. The serial port can either be a PC based serial port or the serial port located on the Barix Exstreamer device.

If you are using a PC based serial port, enter the COM port address. This is typically 1 or 2 for built in serial ports.

If you are using the serial port on a Barix Exstreamer device, enter the IP address of the Exstreamer device (refer to the section “Configuring Barix Exstreamer Devices”).

3. Enter the number of multi-room music systems that are linked together. CasaTunes supports linking six Russound CAV systems and two Nuvo Concerto/Grand Concerto systems.
4. For each source input, enter the type of device that is connected and the source configuration. You should only enter all the non-CasaTunes music server sources that are connected, for example, any tuners,

- satellite, CD-changers, etc. You will enter the information on the CasaTunes music server sources in the next section.
5. Enter the information for each zone (or room).

Setting up your hardware for CasaTunes

Now that you have selected the machine you are going to use for your CasaTunes Multi-Room Music Server PC and where this PC will be located, you are ready to complete the hardware setup.

Option 1

If you decided to co-locate your CasaTunes PC next to your multi-room music system, then move, if necessary, your CasaTunes PC to this location and connect the stereo output(s) from your sound card(s) to the source input(s) on your multi-room music system.

Next, record the name of the Windows DirectSound Driver associated with each stereo output and source input on your CasaTunes worksheet. If you are using multiple sound cards, or a sound card with multiple stereo outputs, you will need to correctly identify which Windows DirectSound Driver is being used for each stereo output. Typically, this information is included in the product manual, or is easily determined by the name of the driver.

If you are not sure of the correct DirectSound driver for a particular stereo output, you can discover the correct driver by connecting the stereo output to your input source, use the keypads to select this source for a zone, and use Windows Media Player to play a song using this DirectSound driver. If you do not hear any music playing in this zone, then select a different DirectSound driver until you hear the music playing. Record the name of this DirectSound driver for this stereo output and input source.

Next, connect the serial port on your CasaTunes PC to the serial port on your music system.

☞ If you are using a Nuvo Technologies tuner, connect a second serial port cable from your CasaTunes PC to your tuner (on the rear of the device). Record the serial port/COM port used for this source on the worksheet. This step is not required for Russound tuners.

Option 2

First, you must configure each Barix Exstreamer device.

Repeat the following steps for each Exstreamer device:

Setup and record the IP address used by the Exstreamer device

1. Locate the Exstreamer device next to your multi-room music system and connect the device to your network
2. Decide how this device is going to be used. The device can be used as:
 - a. A source input to your multi-room music system
 - b. A serial port to control you multi-room music system or tuner
 - c. Or both
3. Connect the ear piece to the Exstreamer device
4. Connect power and listen to and record the IP address the device is using on your worksheet.
 - a. If the serial port on the device is to be used to control the music system, enter the IP address in the controller section of the worksheet
 - b. If the serial port on the device is to be used to control a Nuvo tuner, enter the IP address in the source setup section of the worksheet for the tuner source
 - c. If the device is being used as a source to play your PC based music, enter the IP address for the device in the source setup section of the worksheet for the Exstreamer Media Player source type

Configure the Exstreamer Media Player device for use with CasaTunes

5. Type in the Address bar, using Internet Explorer, <http://> followed by the IP address you recorded in the previous step, for example, <http://192.168.0.12>
6. Select 'Config' from the web page
7. Under 'Settings' select 'Streaming'
8. Select '4 - Streaming Receiver' as the 'Mode'
9. Select 'Apply' (the Exstreamer will re-boot)

Configure the Exstreamer Serial Server settings

10. If you are not going to use the serial port on this Exstreamer device then skip to Step 14.
11. On the 'Config' page select 'Serial' under 'Settings'
12. Select the following baud rate depending on which device is being controlled by the serial port on this Exstreamer device:
 - a. Russound CAM/V music system - 19,200 baud
 - b. Nuvo Concerto music system - 9,600 baud
 - c. Nuvo Tuner - 9,600 baud
 - d. Nuvo Grand Concerto music systems - 57,600 baud
 - e. The remainder of the settings should be as follows:
 - i. 8 Data Bits
 - ii. No Parity
 - iii. 1 Stop Bit
 - iv. Set the 'Local Port' to 12303

13. Select 'Apply' (the Exstreamer device will re-boot)
14. Repeat for each Exstreamer device

For each Exstreamer device, connect the stereo output to the input source on your music system. In the source setup section of the worksheet, record which source input this device is connected to and the IP address for this device.

If you are using the serial port on this device to control the music system or tuner, connect the serial port cable from this device to the music system or tuner, and record on the worksheet the IP address of this device in the 'Controller Setup' or 'Source Setup' sections, respectively.

☞ The 9-pin serial cable that ships with the Barix Exstreamer device is terminated on both ends with a female connector (Serial 9-pin F/F cable). You will need to replace these cables with a 9-pin serial cable that is terminated with a male connector on one end, and a female connector on the other (Serial 9-pin F/M cable). If you purchase your Exstreamer from the CasaTunes store, the correct cable is included.

You have now completed the hardware setup.

Installing the CasaTunes software

Before installing the CasaTunes Multi-Room Music Server software you must install and/or configure the following Microsoft components:

- Microsoft Internet Information Server (IIS)
- Microsoft .Net Framework 2.0
- Microsoft AJAX ASP.NET

Installing Internet Information Services (IIS)

On Microsoft Windows XP

- Open the Control Panel and select Add or Remove Programs
- Select Add/Remove Windows Components
- Check the checkbox next to "Internet Information Services (IIS)", and click on next
- Follow the prompts to complete the installation of IIS

On Microsoft Vista

- Open the Control Panel
- Click on 'Programs'
- Click on 'Turn Windows features on or off'
- Enable 'Internet Information Services'
- Expand 'Internet Information Services', 'World Wide Web Services' and 'Application Development Features'
- Make sure the following items are enabled
 - .Net Extensibility
 - ASP.Net

- ISAPI Extensions
- ISAPI Filters
- Expand 'Web Management Tools'
 - Enable 'IIS 6 Management Compatibility'
- Select 'OK' and follow the instructions to install IIS

Installing Microsoft .Net Framework 2.0

☞ If you are installing the CasaTunes software on a Microsoft Vista PC you can skip this step, since the framework comes pre-installed.

To download and install the Microsoft .Net Framework 2.0 from the Microsoft web site on to your Windows XP machine click [here](#) and follow the online instructions.

Installing Microsoft ASP.Net AJAX 1.0

Click [here](#) to download and install Microsoft ASP.Net AJAX 1.0 from the Microsoft web site and follow the online instructions.

Installing CasaTunes on a machine that does not require a password to log on

If the machine where you are installing CasaTunes does not require a password to log on, then you will need to change the following security setting, or alternatively you can add a password to your logon account (which Microsoft recommends).

To change the security setting:

- Open the Control Panel, select "Performance and Maintenance" and select Administrative Tools
- Open the "Local Security Policy" applet Double-click "Security Settings", "Local Policies" and "Security Options"
- Double-click in the right tab on the item "Accounts: limit local accounts use of blank passwords to console logon only" and make sure it is "disabled"

You are now ready to install the CasaTunes software.

Installing the CasaTunes Software

☞ If you are installing CasaTunes on a Windows Vista PC, you must start Microsoft Internet Explorer in the 'Run As Administrator' mode. Right-click on the Internet Explorer icon and select 'Run as Administrator'.

Start Internet Explorer.

Enter <http://www.casatools.com/setup.aspx> in the Internet Explorer address bar.

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Click on 'Download Software' and follow the prompts on the screen.

The installation application will download the latest version of the product from the CasaTools website, so you can always be sure that you are running the latest version of the product.

On the CasaTunes Settings and Components page check on the 'Install CasaTunes Application as a Media Center Application' if you want to be able to control CasaTunes from within Media Center.

The 'Startup Page Settings' allows you to configure the startup page, that is the page that is displayed when you launch CasaTunes from the browser or from within Media Center. The two different pages are shown below.

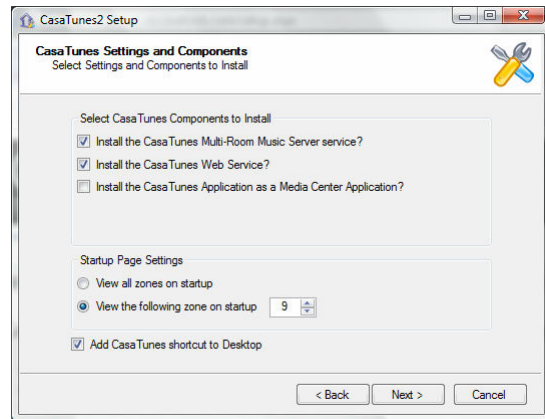


Figure 1 - The All Zones Page

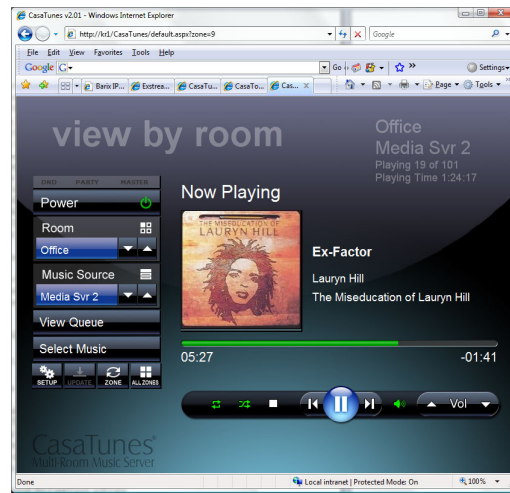
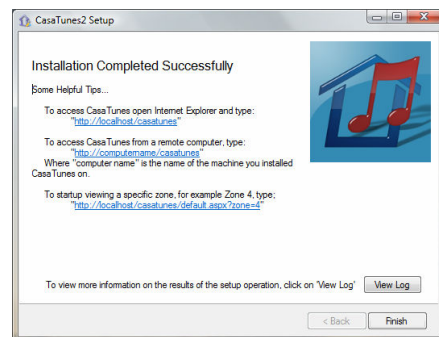


Figure 2 - The Zone Page

After the installation completes, the application will display whether the install completed successfully or not. You can check the log file ('View Log') for more information on any installation errors and warnings. In addition, the 'Expert Zone' knowledge base on the CasaTools web site contains an installation trouble shooting section that discusses common installation issues.



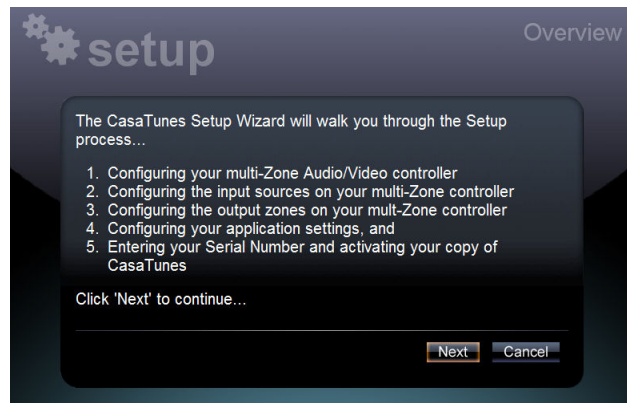
After you have successfully completed the installation, the CasaTunes Multi-Room Music Server will be automatically started.

Configuring the CasaTunes Software

To start the CasaTunes User Interface, double-click the CasaTunes icon on the Desktop.

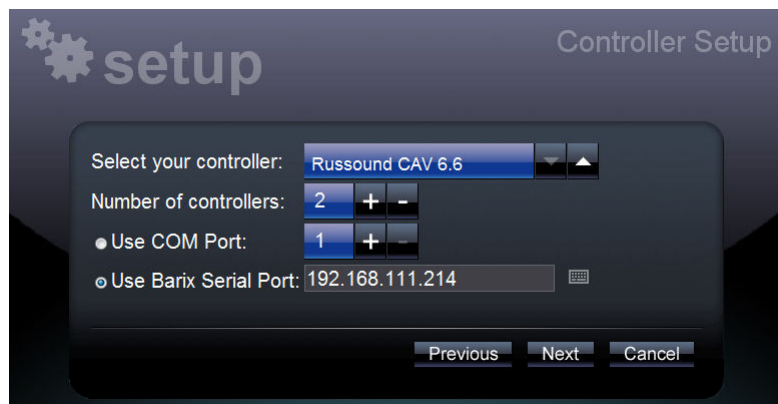
If this is the first time you started CasaTunes, the browser will automatically start the Setup Wizard.

This wizard will walk you through the process of configuring your CasaTunes software ... Use the information from your CasaTunes worksheet to help complete your Setup.



Click 'Next' to configure your multi-room music system controller.

In this step you select the type of multi-room controller you have, the number of units that are linked together and how CasaTunes will communicate with the controller.



You control your multi-room controller using either a serial port (COM/RS232 port) attached to your CasaTunes PC or using the serial port located on your Barix Exstreamer device.

Enter either the COM port number (typically 1 or 2) or the IP address of the Barix Exstreamer device. This information should be recorded on your worksheet.

The next step in the Setup process is to configure your input sources for your multi-room music system.

CasaTunes supports several different sources, including:

1. **None** - Select this option if there is no source attached to this input. Setting the Source to None will avoid displaying the source in the CasaTunes UI.
2. **Windows Media Player** - Select this option if the source connected to this input is from a stereo output on your PC sound card. You will need to specify the Windows DirectSound driver associated with this stereo output.
3. **Exstreamer Media Player** - Select this option if the source connected to this input is from a stereo output on your Barix Exstreamer device. You will need to specify the IP address associated with this Exstreamer device (as in the example above)
4. **Russound AM/FM, XM, and Sirius Radio** - Select these options if the input source is connected to an output on your Russound tuner.
5. **Nuvo AM/FM/WX, and XM Tuner** - Select these options if the input source is connected to an output of your Nuvo Technologies tuner.



To select the next source to configure, click the up/down Select Source spinner. Repeat these steps until you have configured all the input sources.

The next step is to configure the zones. The zone settings will vary depending on the multi-room music system installed.

To select the next zone to configure, click the up/down 'Select Zone to configure' spinner.

Repeat these steps until you have configured all the zones.



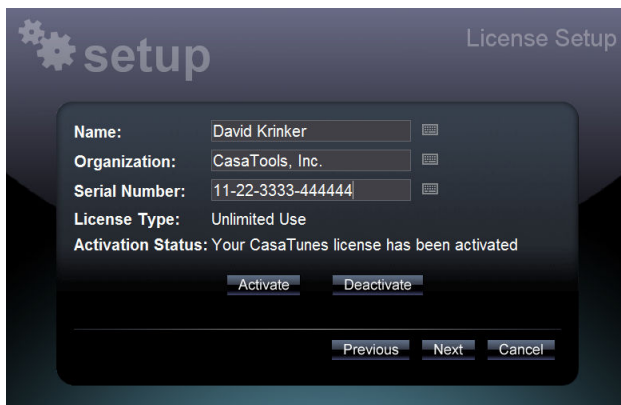
If a zone is not being used, check the 'Hide Zone' checkbox to avoid the zone from being displayed in the CasaTunes UI.



Click 'next' to configure various application settings, including whether to enable iPod support, and if so, select the drive letter that corresponds to your 'docked' iPod drive.

You can also configure the size of the albums to be displayed when viewing your music collection by Album Cover.


The default is to view albums using the 'small album' cover size. The smaller the album cover size, the more albums you can view at a time on the screen. The album cover sizes are displayed to scale.



The next step in the setup process is where you enter your CasaTunes licensing information.

Once you enter the Serial Number that was provided to you by CasaTools or by your Reseller, click on the 'Activate' button to activate your software license.

If you do not activate your software license within the 14 day evaluation period, the software will cease to function, and the next time you start CasaTunes it will automatically redirect you to the license activation screen.

 If you decide to move CasaTunes to a different machine, you must first deactivate your license on the current machine, and then re-activate your license on the new machine.

The Summary page provides a summary of your configuration settings. If the information is correct, click on 'Finish' to complete the setup. You can also click on 'Cancel' at any time to quit the setup without making the changes, and you can use 'Next' and 'Previous' to move to the setup page where you want to make changes. Once you have finished setup your settings are automatically saved.

Congratulations! You have completed the installation of CasaTunes.

Appendix A – CasaTunes Worksheet

Job Name:			Date:		
Multi-Room Music System Setup Information					
Multi-Room Controller	<input type="checkbox"/> Russound CAM/V 6.6 <input type="checkbox"/> Nuvo Concerto <input type="checkbox"/> Nuvo Grand Concerto				
Serial Communication	<input type="checkbox"/> PC Serial Port <input type="checkbox"/> Serial Port on Exstreamer				
	COM Port or Exstreamer IP Address:				
Number of linked units					
Source Setup Information					
Source #	Source Name	Source Type	Source Configuration Info		
1					
2					
3					
4					
5					
6					
7					
8					
Source Types Available:					
None		Russound AM/FM Radio	Nuvo AM/FM/WX Tuner		
Barix Media Player		Russound XM Radio	Nuvo XM Tuner		
Exstreamer Media Player		Russound Sirius Radio			
Other					
Zone Setup Information					
Zone #	Used	Zone Name			
1	<input type="checkbox"/>				
2	<input type="checkbox"/>				
3	<input type="checkbox"/>				
4	<input type="checkbox"/>				
5	<input type="checkbox"/>				
6	<input type="checkbox"/>				
7	<input type="checkbox"/>				
8	<input type="checkbox"/>				
9	<input type="checkbox"/>				
10	<input type="checkbox"/>				
11	<input type="checkbox"/>				
12	<input type="checkbox"/>				
13	<input type="checkbox"/>				
14	<input type="checkbox"/>				
15	<input type="checkbox"/>				
16	<input type="checkbox"/>				

Appendix B – Completed Sample CasaTunes Worksheet

Job Name:	The Fitzgerald Family	Date:	5/1/2007
Multi-Room Music System Setup Information			
Multi-Room Controller	<input checked="" type="checkbox"/> Russound CAM/V 6.6 <input type="checkbox"/> Nuvo Concerto <input type="checkbox"/> Nuvo Grand Concerto		
Serial Communication	<input type="checkbox"/> PC Serial Port <input checked="" type="checkbox"/> Serial Port on Exstreamer COM Port or Exstreamer IP Address: 192.168.0.20		
	Number of linked units	2	
Source Setup Information			
Source #	Source Name	Source Type	Source Configuration Info
1	AM/FM Tuner	Russ AM/FM Radio	Orlando Stations File
2	XM Tuner	Russ XM Radio	XM Stations File
3	Media Svr 1	Barix Media Player	192.168.0.20
4	Media Svr 2	Barix Media Player	192.168.0.21
5	Media Svr 3	Barix Media Player	192.168.0.22
6	Media Svr 4	Barix Media Player	192.168.0.23
7			
8			
Source Types Available: None Russound AM/FM Radio Nuvo AM/FM/WX Tuner Barix Media Player Russound XM Radio Nuvo XM Tuner Exstreamer Media Player Russound Sirius Radio Other			
Zone Setup Information			
Zone #	Used	Zone Name	
1	<input checked="" type="checkbox"/>	Dining Rm	
2	<input checked="" type="checkbox"/>	Kitchen	
3	<input checked="" type="checkbox"/>	Great Rm	
4	<input checked="" type="checkbox"/>	Play Rm	
5	<input checked="" type="checkbox"/>	Pool	
6	<input checked="" type="checkbox"/>	Backyard	
7	<input checked="" type="checkbox"/>	Master	
8	<input checked="" type="checkbox"/>	Master Bath	
9	<input checked="" type="checkbox"/>	Office	
10	<input checked="" type="checkbox"/>	BR 2	
11	<input checked="" type="checkbox"/>	BR 3	
12	<input checked="" type="checkbox"/>	Guest BR	
13	<input type="checkbox"/>		
14	<input type="checkbox"/>		
15	<input type="checkbox"/>		
16	<input type="checkbox"/>		