



KRYPTOTEK CHOREOGRAPHER'S ASSISTANT

Owner's Manual

ABSTRACT

Instructions and tips to maximize the value and potential of the KryptoTek Choreographer's Assistant

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Elevate Your Dance Sequences in Second Life

As the name suggests, the **KryptoTek Choreographer's Assistant** is your ultimate companion for designing captivating dance performances within the virtual realm of Second Life. Whether you're a seasoned choreographer or just stepping onto the digital stage, our feature-packed assistant streamlines your creative process and enhances your artistic vision.

Key Features and Benefits:

1. **Musical Synchronization:** Imagine choreographing the rhythm of your favorite tunes! Our assistant seamlessly synchronizes animations with in-world music. Add songs or videos to the system's playlist and replay them on command.
2. **Precision Announcements:** Fine-tune your dance steps with precision. As each element of the sequence unfolds, our assistant announces crucial details such as timing, duration, animation names, and parameters. No more guesswork—just perfect timing.
3. **Flexible Positioning and Rotation:** Three distinct methods allow you to position and rotate dancers effortlessly. Enhance live performances by adjusting dancer placement during the show.
4. **Group Animations:** Whether it's a solo act, duet, or ensemble performance, our assistant handles it all. Program individual dancers or groups to execute the same or different animations seamlessly.
5. **Automatic Synchronization:** Say goodbye to timing discrepancies! Our system continuously compares actual elapsed time to expected time during dance sequences. Micro-adjustments keep every dancer in sync.
6. **Step Isolation and Replay:** Need to fine-tune a specific step? Isolate any part of the dance sequence for focused refinement. You can also start the sequence from any step, making final adjustments a breeze.
7. **Layered Animations:** Unlock creativity by layering animations. Use segments from longer animations to craft unique performances that stand out.
8. **Animation Exploration:** Dive deep into animations. Slice and analyze fragments to discover new possibilities and refine your choreography.
9. **Cross-System Compatibility:** Export your meticulously crafted dance sequences for use in other popular systems. The Choreographer's Assistant ensures seamless transitions across platforms.

With the KryptoTek Choreographer's Assistant, your dance creations will dazzle audiences, leaving them spellbound in the immersive world of Second Life. Get ready to choreograph like never before!

Getting Started

What's in the Folder?

When you receive the Choreographer's Assistant, it comes in a folder with the same name and version number. Inside, you'll find:

- **Choreographer's Assistant v2.x.x**

This is the heart of the system. You can either rez it inworld or wear it as a HUD.

- **Dance Stands (labeled A through E)**

These are used inworld to position and animate dancers.

- **Waypoints (labeled A through E)**

Waypoints come in handy for advanced dance sequences. They help calculate movement commands when you want to shift dancers from their starting positions during a dance routine.

Creating a New Dance Sequence: The Basics

Here's how you create a choreographed dance sequence:

1. **Add Music**

Start by adding the URL of the music video or audio to the system's playlist.

2. **Animations**

Next, add the animations you'll use in your dance sequence to the Choreographer's Assistant's inventory.

3. **Edit the ".dance" Notecard**

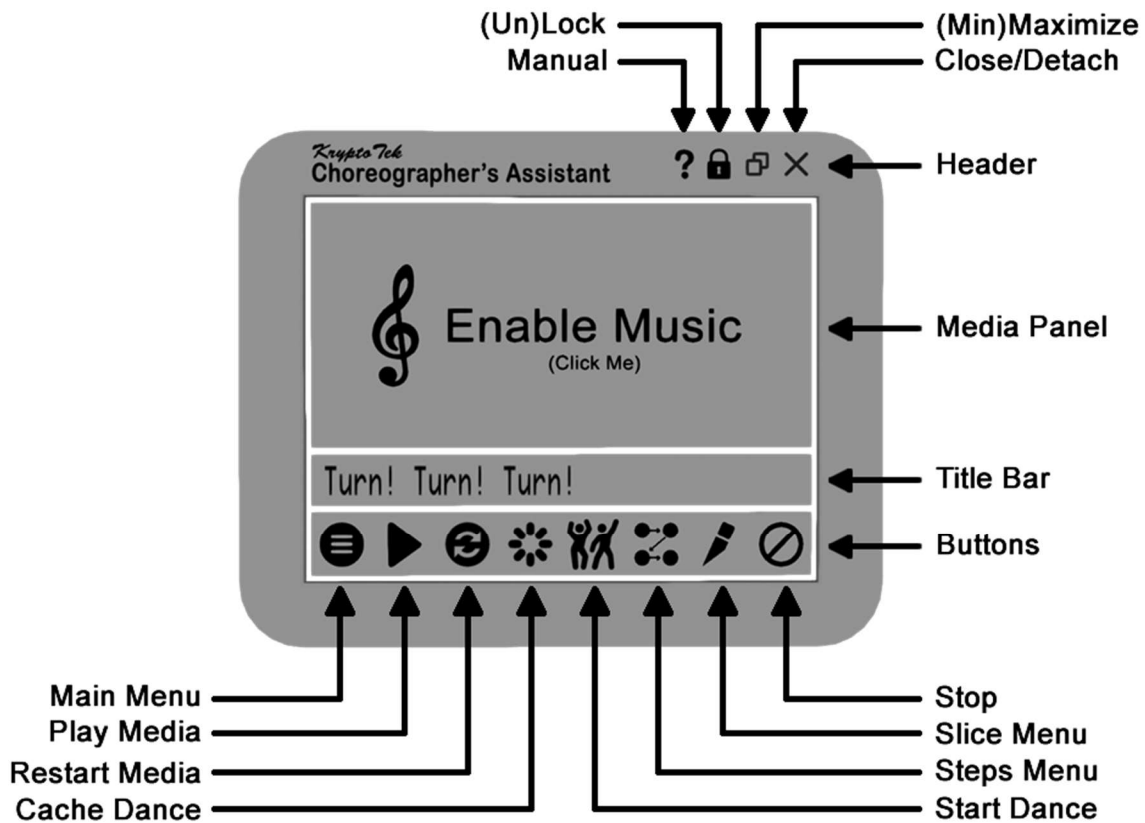
This is where the magic happens. Specify timestamps, animations, or commands to play during your dance.

The following sections will explore these topics in depth, starting with an explanation of the system controls.

Once you've got the basics down, explore the advanced capabilities of the system.

Controls

Refer to this illustration to identify the Choreographer's Assistant controls:



Header

Four controls are available at the top of the Choreographer's Assistant.

Icon	Description
?	Help Opens (gives) a copy of the owner's manual.
🔒	Lock When worn as a HUD and if RLVA is enabled allows the user to lock or unlock the HUD in position.
🖱️	Minimize Minimizes or maximizes the Choreographer's Assistant. When minimized, the media panel and title bar are hidden from view to conserve space.
✕	Close When worn as a HUD, clicking on the "Close" icon will detach the Choreographer's Assistant from the user's HUD.

Media Panel

Click on the media panel to enable playing videos or audio inworld. When enabled, the face of the media panel will change to read "Player Stopped" when no media is playing.

Title Bar

The title bar displays the title of the currently selected dance video or audio. Clicking on the title bar will open the Playlist menu option, which allows the user to select a different dance.

Buttons

For speed and ease of use, commonly used menu options can be triggered with a single click.

Icon	Description
	Menu Opens the main menu. All the features and options of the Choreographer's Assistant can be accessed here.
	Play Touching the play icon will play the selected media (if any).
	Restart Restarts the selected media. When media is "restarted", it forces the source website to treat the request as a new request.
	Cache Selecting this option caches animations by briefly playing every animation used in the dance.
	Dance Clicking the dance icon will immediately play the selected dance sequence.
	Steps Opens the Steps menu option. Use this feature to play or replay a single step in the dance sequence, or to play from a step to the end of the dance.
	Slice Opens the Slice menu option. Use this feature to analyze animations that have been added to the contents of the Choreographer's Assistant.
	Stop Clicking on the Stop icon immediately stops the currently playing media and/or dance sequence.

Adding Animations

Add your own animations to the contents of the Choreographer's Assistant to use them in one or more dance sequences. Adding animations consists of the following steps:

1. Rez the Choreographer's Assistant inworld or wear as a HUD.
2. Right Click Edit (or Open) its contents.
3. Drag animation files from your inventory into the object's contents.

Once animation files have been added to the contents of the Choreographer's Assistant, you may then use them in your dance sequences.

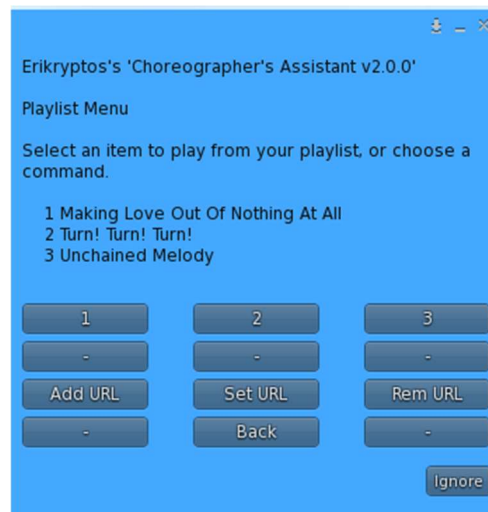
Adding Songs to the Playlist

Let's learn by example and add Taylor Swift's hit "Shake It Off" to your playlist:

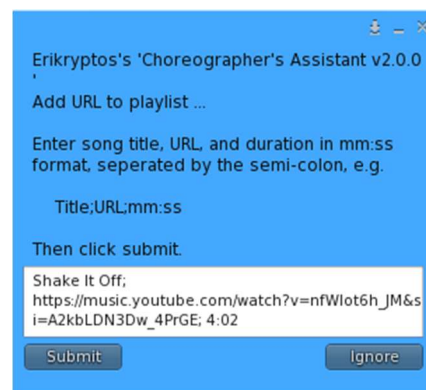
1. Visit music.youtube.com and search for Taylor Swift's "[Shake It Off](https://music.youtube.com/watch?v=nfWlot6h_JM&si=A2kbLDN3Dw_4PrGE)".
 - a. Note the length of the video (4:02), and,
 - b. Copy the shared link of the video to your clipboard, e.g.

https://music.youtube.com/watch?v=nfWlot6h_JM&si=A2kbLDN3Dw_4PrGE

2. Click on the menu icon on the Choreographer's Assistant and select the Playlist* option, or click on the title bar, which also opens the Playlist menu.



3. Select the "Add URL" option and enter the Title, URL, and Duration in the text box separated by the semi-colon. Then click Submit:



Congratulations! You've added your first song to the Choreographer's Assistant.

Editing the .dance Notecard

The “.dance” notecard is where the choreography is stored. To edit the notecard:

1. Rez the Choreographer's Assistant inworld or wear as a HUD.
2. Right Click, Edit or Open and display its contents.
3. Locate the “.dance” notecard in the object's contents and double click.

In the body of the notecard, add your new dance sequence.

Every dance begins with a title in the format:

Dance Title =

Followed by a series of times and animations separated by the vertical bar (pipe) character in the format:

mm:ss.ff | animation name

The last line of every dance sequence must be a STOP command in the format:

mm:ss.ff | STOP

Putting this all together, a (very) simple dance sequence could look like this (where animation1 is the name of an animation you've added to the system):

Shake It Off =
0:00 | animation1
4:02 | STOP

IMPORTANT: *The title of the dance sequence must exactly match the title of the song you previously added to the playlist!*

Note that you don't need to supply fractions of a second unless needed. Also, if you'd prefer to avoid converting seconds to minutes, the system will also accept:

Shake It Off =
0 | animation1
242 | STOP

In our example, 4 minutes, 2 seconds is the equivalent of $(4 * 60) + 2 = 242$ seconds.

Now click Save to save your updates to the “.dance” notecard. The system will automatically process your changes. If it detects any errors, it will provide you error messages in Owner chat.

Congratulations! You've created your first choreographed dance sequence for Taylor's hit single.

Playing your Choreographed Song

To recap, we've:

- Added one or more dance animations to the contents of the Choreographer's Assistant.
- Added the music for Taylor Swift's "Shake It Off" to the playlist.
- Edited the ".dance" notecard to record a (very) simple choreography.

Now we're ready to playback and test it!

1. Rez the Choreographer's Assistant inworld or wear it as a HUD.
2. Rez a dance stand inworld and stand (sit) on it. You will be asked to grant permission to animate your avatar. Accept the request.
3. Click on the media panel to enable it. When media is enabled, the media panel will display "Player Stopped" instead of the default texture.
4. Select "Shake It Off" from the playlist. When selected, the title bar will update with the title of the selected song.
5. Click the Play  menu icon. There will be a slight lag before the music begins playing.

If an advertisement from YouTube starts playing instead of the song, you can wait for the advertisement to end, or click the Restart  menu icon to try and skip the ad.

6. When the music starts, click the Dance  menu icon.

If nothing happens, or it doesn't work as expected, try repeating these instructions (above), or check out the section on Trouble Shooting (below).

By dancing to the animation specified in your dance sequence, you've successfully created and performed your very first choreographed dance! While there are many more features and benefits to explore, you've already mastered the essentials of using the system to create captivating performances.

Product Documentation

Configuration Notecard

The configuration notecard (".config") is stored in the contents of the Choreographer's Assistant and contains key name and value pairs that can be used to customize your system. They are:

- Server Channel = integer
- Remote Channel = integer
- PlayDelay = float (seconds)
- Watch2Gether Room = URL
- Watch2Gether Key = key

Server & Remote Channels

The Server Channel is the Second Life chat channel that your Choreographer's Assistant listens on to receive updates from Dance Stands when an avatar "sits" or "stands" on a stand.

Conversely, the Remote Channel is the Second Life chat channel that that Dance Stands listens on to receive commands from the server, e.g. the Choreographer's Assistant.

Under normal circumstances, it's unnecessary to modify these default values. The system also automatically limits the commands it receives and sends based upon the **OWNER** of the objects. Therefore, two Choreographer's Assistants and their pose stands owned by separate owners will NOT conflict or interfere with each other, even though they are sharing the same chat channel numbers.

However, one example where updating the channel numbers would be useful is the case where the same owner wants to use multiple copies of the Choreographers' Assistant on the same sim at the same time. In that case, we need to make sure that each copy of a Choreographer's Assistant and its corresponding dance stands are using their own, unique, values for Server and Remote channels.

In that case:

- Edit the .config notecard in the second or subsequent Choreographer's Assistant and assign new, unique values for Server and Remote channel numbers.
- Rez the required number of Dance Stands inworld for the second or subsequent Choreographer's Assistant. Edit the .config notecard contained in the contents of each Dance Stand with the new values for Server and Remote channel numbers.

Save the updated notecards to implement your changes.

Play Delay

If the user has enabled "AutoDance" in the Settings* submenu of the Choreographer's Assistant, the system will automatically start the dance sequence for a song title when the media is played.

PlayDelay is the amount of time, in seconds, the system will delay allowing for your viewer to load and start playing the media before starting the corresponding dance sequence.

Since everyone's network speed, network latency, viewer settings, etc. are unique, customize this value based upon your own experience to shorten or lengthen the delay.

Watch2Gether Settings

Two values are necessary to integrate your Choreographer's Assistant with this 3rd party service. Using Watch2Gether can significantly improve your experience using YouTube as the source for audio and video.

First, we've noticed fewer ads and delays in playing YouTube videos and audio using Watch2Gether vs without.

Second, and most importantly, if your Choreographer's Assistant is rezzed inworld, all the avatars watching and listening to the media are much more likely to be kept in synchronization.

The two parameters are:

- Watch2Gether Room. This is the URL of your shared Watch2Gether "room", a web page that you and others can access playing the same media at the same for all users.
- Watch2Gether Key. This is the API Key for your room. It permits the Choreographer's Assistant to automatically set and change the media being played in the Watch2Gether room.

See the documentation on Watch2Gether (below) for more information on this useful feature.

Dance Notecard

The dance notecard (".dance") contains the series of animations and instructions for your choreographed dances. As mentioned previously, a "dance" consists of:

- The dance title.
- One or more animations and commands.
- A stop command, that ends the dance.

For example:

```
Shake It Off =  
0:00| animation1  
4:02| STOP
```

Dance Title

The dance title line consists of the title of a dance followed by the equals (=) sign and (optionally) a "part" letter.

Title = A

If a "part" is specified, all the animation and movement commands following the title line will only be performed for dancers using Dance Stands with the same Part letter named in the Dance Stand's description. (Note: Although the title of the Dance Stand also includes the part, (A, B, C) it is the value stored in the object's description that is controlling.)

Thus, if a dance sequence has one set of animations for a dancer or set of dancers, and another set of animations for a second dancer, or set of dancers, the Choreographer would include create two dance sequences as illustrated below:

```
Shake It Off = A
0:00 | animation1
4:02 | STOP

Shake It Off = B
0:00 | animation2
4:02 | STOP
```

In this example, dancers using "A" dance stands would play animation1 at timestamp 0:00, while dancers using "B" dance stands would play animation2, also at timestamp 0:00.

To summarize:

- If a dance title does not contain a part designation, any dance stand will play that part.
- If a dance tile includes a part designation, only dance stands with the same value named in their description will play that part.

Dance Commands

Dance commands follow the Dance Title and have the following general format:

```
mm:ss.f | Command: Value; Value 2; Value 3;
```

That is:

- A timestamp in mm:ss.f format such as 1:15.3 (One minute, 15.3 seconds).
- The vertical bar (pipe) separator "|".
- A command (see below)
- The colon (":")
- One or more values required by the command, separated by the semi-colon.

in the examples shown above:

```
0:00 | animation1
```

Is a shorthand version for:

```
0:00 | PLAY: animation1
```

Note: The shorthand version for the PLAY command is included in the system for ease of use and for compatibility with other systems.

Animation Commands

The system supports the following commands that animate the dancer:

- mm:ss.f | animation
- mm:ss.f | PLAY: animation
- mm:ss.f | START: animation
- mm:ss.f | STOP: animation.

The first two examples are synonymous and are the most used commands. The START and STOP animation commands are generally used to “layer” animations as explained below.

In general, when the system reads a “PLAY” command, it stops any prior animation also started with a PLAY command. However, animations started with the START command will only be stopped when the system encounters a STOP command for that same animation.

For example:

```
0:00 | animation1
0:02 | animation2
0:10 | START: animation3
0:10 | START: animation4
0:13 | STOP: animation4
0:15 | STOP: animation3
0:15 | animation5
0:20 | STOP
```

In this example, animation1 would start at timestamp 0:00. Then at 0:02, animation1 would be stopped, and animation2 started. At 0:10, the first START command would stop animation2, and start animation3. Then, also at 0:10, animation4 would also be started.

In Second Life, if two or more animations animating the same “avatar bones” with the same Priority are running at the same time, the viewer visibly plays the LAST animation started, but continues to play the prior animation(s) in the background (not visible). If the last animation started is then stopped, the previously started animation(s) would then become visible.

In our example, that means that at timestamp 0:13, animation3 would appear to start playing, but since it started playing 3 seconds earlier (at timestamp 0:10), users would see the 4th through 5th second of the animation (until it was stopped at timestamp 0:15).

This technique is sometimes called layering, in that the choreographer is layering more than one animation at a time in the dance sequence, using the START and STOP features of the system to control which portion of an animation is visible to the audience.

In our example above, all the animations are assumed to have the same Priority (typically Priority 4).

In the case of animations with different priorities running at the same time:

The highest priority animation will play (visible) until it is stopped.

Consider this example:

0:10 | START: animation1 (priority 5)

0:10 | START: animation2 (priority 4)

0:15 | STOP: animation1 (priority 5)

In this case, animation1 will play for 5 seconds, and animation2 will begin playing at timestamp 0:15 at 5 seconds into the animation, i.e., not at its beginning.

Movement Commands

The system supports several different to position and arrange the dancer:

- mm:ss.f | POSE: <vector position>; <vector rotation>
- mm:ss.f | HOME: <vector position>; <vector rotation>
- mm:ss.f | MOVE: <vector position>; <vector rotation>
- mm:ss.f | MOVE: <vector position>; <vector rotation>; float time

The POSE command positions and rotates the DANCER on the dance stand. The dance stand does not move or change rotation.

The HOME and MOVE commands position and rotate the DANCE STAND itself. Because the dancer is linked to the dance stand, moving, or rotating the dance stand will also move or rotate the dancer.

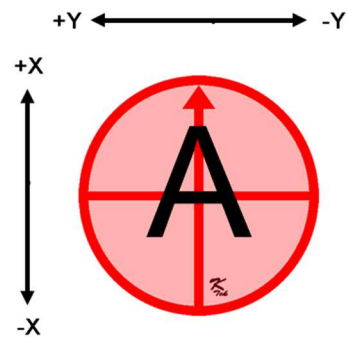
POSE Command

Posing (positioning) the dancer on the dance stand is useful to make minor adjustments during the dance sequence (for example, to avoid dancer's colliding) and to support dance sequences that include couples' animations.

Dance stands include an arrow on their face pointing to the "forward" direction of the dance stand's local rotation. POSE commands are always relative to the local rotation of the dance stand.

The position vector of the POSE command has three values, <X, Y, Z>. Each value (in meters) moves the dancer in a different direction, relative to the center of the dance stand and the directional arrow shown on its face.

- X. Positive values move the dancer forward. Negative values move the dancer backwards.
- Y. Positive values move the dancer to the left. Negative values move the dancer to the right.
- Z. Positive values move the dancer upwards. Negative values move the dancer downwards.



The rotation vector (in degrees) of the POSE command rotates the dancer on their X, Y, or Z axis.

- X. Positive values rotate the avatar rightward, while negative values rotate the avatar leftward.
- Y. Positive values rotate the avatar forward. Negative values rotate the avatar backwards.
- Z. Positive values rotate the avatar counterclockwise. Negative values rotate the avatar clockwise.

HOME Command

At the start of every dance sequence, Dance Stands capture their absolute position and rotation in region coordinates. HOME commands may be used by the choreographer to move the dance stand (and dancer) relative to the HOME position during the execution of the dance sequence.

For example:

```
0:30.0 | HOME: <3, 0, 0>; <0, 0, 45>
0:45.0 | HOME: <0, 0, 0>; <0, 0, 0>
0:60.0 | HOME: <0, 1, 0>; <0, 0, -45>
```

In the example above, at timestamp 0:30.0 the Dance stand will move 3 meters along the X axis and rotate 45 degrees counterclockwise on the Z axis.

At timestamp 0:45.0, the Dance Stand is returned to its starting position and rotation.

At timestamp 0:60.0, the Dance Stand moves 1 meter along the Y axis and rotates 45 degrees clockwise.

Note, in the above example, deleting the middle step at timestamp 0:45.0 would have NO effect on the position and rotation of the Dance Stand at timestamp 0:60.0. That is because HOME commands are always calculated relative to the Dance Stand's position and rotation at the start of the dance.

MOVE Command

There are two variations of the MOVE command supported by the system.

- mm:ss.f | MOVE: <vector position>; <vector rotation>
- mm:ss.f | MOVE: <vector position>; <vector rotation>; float time

The first version omits a value for time or sets time to zero. The second version includes a non-zero, positive value for time.

MOVE commands are always interpreted relative to the position of the Dance Stand at the time the command is executed. For example:

```
0:20.0 | MOVE: <1,0,0>; <0,0,0>
0:30.0 | MOVE: <1,0,0>; <0,0,0>
```

At timestamp 0:30.0, the Dance Stand will have moved 2 meters along the X axis.

Contrast that with:

```
0:20.0 | HOME: <1,0,0>; <0,0,0>
0:30.0 | HOME: <1,0,0>; <0,0,0>
```

At timestamp 0:30.0, the Dance Stand will **not** move from its prior position and will remain located exactly 1 meter from the starting position along the X axis.

When time is included in a MOVE command, the Choreographer's Assistant will animate the Dance Stand's movement over the time specified (in seconds), e.g. the entire movement and/or rotations will be spread out over the amount of time indicated.

IMPORTANT: No other movement commands can be accepted by a Dance Stand while a movement animation is running.

For example:

```
0:18.0 | MOVE: <2, 2, 0>; <0, 0, 90>; 7.0
```

In this example, the Dance Stand will move 2 meters along the X and Y axis and rotate counterclockwise 90 degrees over 7.0 seconds of time.

Multiple movement animations can be entered as a single command:

```
0:22.0 | MOVE <0,0,0>;<0,0,90>2.0; <0,0,0>;<0,0,90>;2.0; <0,0,0>;<0,0,90>; 2.0
```

In this example, the Dance Stand will rotate 270 degrees counterclockwise over a period of 6.0 seconds.

The preceding example also illustrates how to reliably achieve rotations greater than 180 degrees, including rotations of exactly 360 degrees.

For example, a rotation of 270 degrees can also be satisfied by rotating the object -90 degrees. And a rotation of 360 degrees can be satisfied by not rotating the object at all. Neither result is likely what the choreographer expected.

Splitting rotations of 180 degrees or larger into multiple rotations of less than 180 degrees solves this Second Life limitation.

Chat Commands

The system supports saying text and integration with 3rd party applications and systems using chat.

```
mm:ss.f | SAY: channel; text  
mm:ss.f | SAY: channel; text; alias  
mm:ss.f | SAYTO: channel, text;  
mm:ss.f | SAYTO: channel, text; key
```

The SAY commands outputs "text" on channel "channel". If the channel is set to zero, it will be said in local chat.

Adding an "alias" to the SAY command on channel zero will result in the chat being said by the "alias". For example:

```
1:06.0 | SAY; 0; Hark, who goes there?; Juliet
```

would result in "Juliet" saying "Hark, who goes there?" in local chat at timestamp 1:06.

Juliet: Hark, who goes there?

The SAYTO command outputs "text" on channel "channel" to the specified object or avatar. If no key is specified, the text is said to the **dancer** on channel "channel". This feature is designed to allow you to send chat to the dancer without needing to know their UUID in advance.

If a key of an avatar or object is specified, SAYTO will send the text to that avatar or object using the specified channel.

This capability of the system allows your choreography to integrate with and control other objects such as curtains, props, etc. that can listen and respond to text commands.

TECHNICAL NOTE:

- Chat on channel zero uses `lISay` and can be heard up to 20 meters from the location of the Choreographer's Assistant.
- Chat on non-zero channels use `llRegionSay`, or `llRegionSayTo` and can be received anywhere within the same region (sim).

Menus

Main Menu

The main (primary) menu can be accessed by touching the menu  icon. The menu displays the currently selected song title, its length (duration) and a hyperlink to the song's location. Clicking on the hyperlink will open the URL of the song on your local computer's browser.

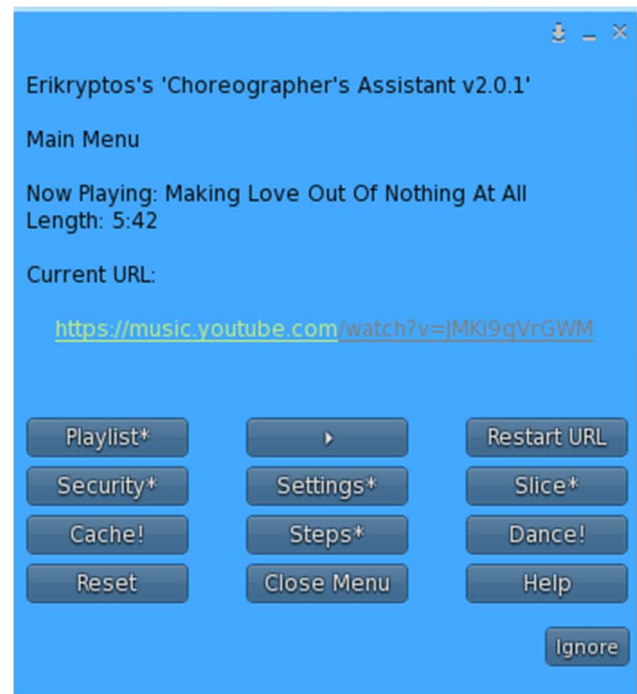
Sub-menus and commands available from the main menu include:

- | | |
|---|---|
| Playlist* | Opens the Playlist sub menu. |
|  | Starts the selected URL from the playlist. |
| Restart URL | Restarts the currently selected URL. |
| Security* | Opens the Security sub menu. |
| Settings* | Opens the Settings sub menu. |
| Slice* | Opens the Slice sub menu. |
| Cache! | Preloads (caches) animations that are used in the selected dance. |
| Steps* | Opens the Steps sub menu. |
| Dance! | Immediately starts the selected dance sequence. |

Reset Resets scripts used by the Choreographer's Assistant.

Close Menu Closes the menu.

Help Offers (gives) a copy of the Owner's manual.

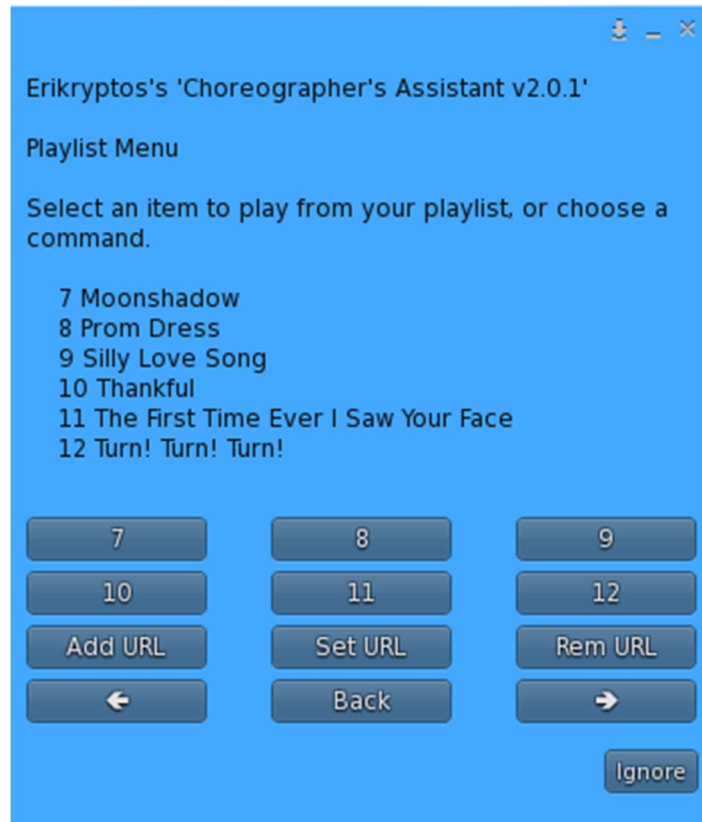


Playlist Menu

The Playlist menu can be accessed from the Main Menu, or by touching on the title bar of the Choreographer's Assistant. This menu is used to add songs, remove songs, and or select a song from your playlist. Songs that are on your playlist do not need to have a corresponding Dance sequence. On the other hand, any dance sequence you create must match the title of a song.

Up to six (6) songs are listed at the top of the menu. Select the number of the song to make it the current selection, or select a command:

- Add URL** Opens the Add URL text box.
Use this option to add new songs to your playlist.
- Set URL** Opens the Set URL text box.
Use this option to select a song to play without adding it to your playlist.
- Rem URL** Opens the Remove URL dialog.
- ←** Navigates to the prior page.
- Back** Navigates to the main menu.
- Navigates to the next page of songs, if any.



Add URL

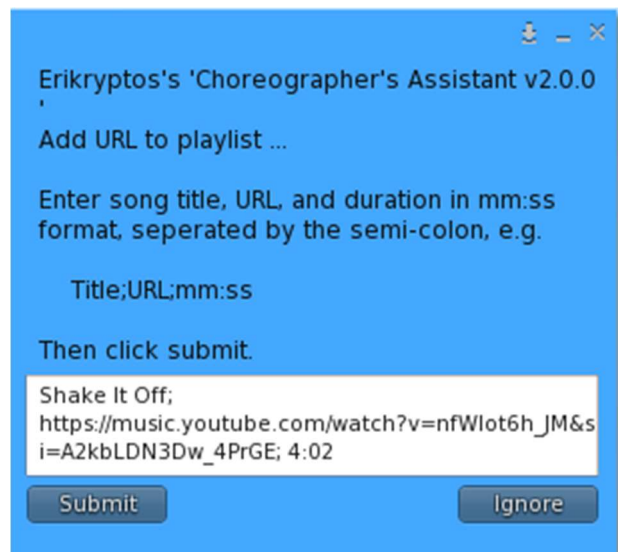
When Add URL is selected from the playlist menu, it opens a text box.

Type the title of the song followed by the semi-colon (;), then paste the URL of the song, followed by the semi-colon (;), and the length (duration) of the song in mm:ss format.

After entering the required data, click on Submit to add the song to your playlist.

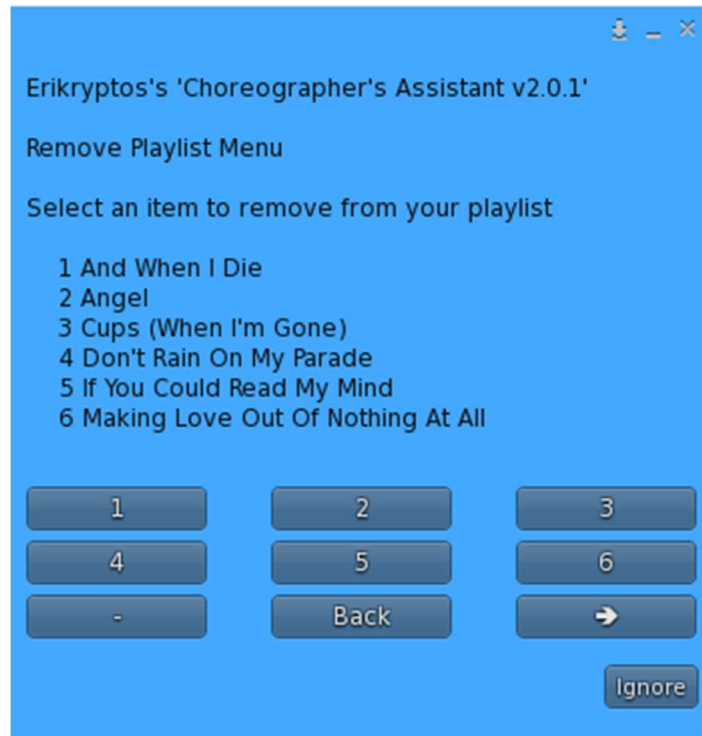
Set URL

Set URL follows the same format as adding an URL to your playlist. The difference between "Add" and "Set" is that "setting" an URL as the current song is temporary. It is NOT added to the playlist.



Rem URL

When Rem URL is selected from the Playlist menu, it opens a sub menu listing your songs. Use the navigation keys to paginate forward and backward. Clicking on a song number will remove that song from the playlist.



Security Menu

Use the Security Menu (not illustrated) to control who has access to the Choreographer's Assistant when rezzed inworld.

- Select "Owner" to restrict access to the owner of the Choreographer's Assistant.
- Select "Group" to grant access to all members of the same group. For this option, use object properties to also set the group associated with the object.
- Select "All" to grant access to anyone.

The owner of the Choreographer's Assistant always has access to the object, even if set to group and the owner leaves that group and/or has another group active.

Settings Menu

The Settings sub menu is accessed from the Main Menu. Key features and options of the Choreographer's Assistant are controlled here:

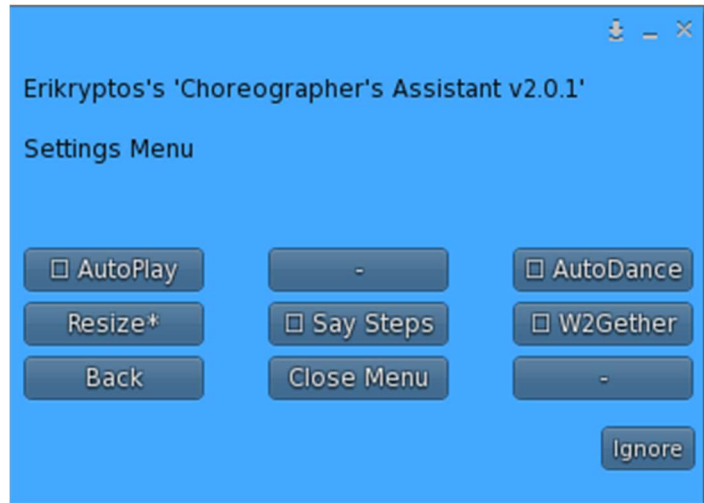
AutoPlay When enabled, selecting a song from the playlist will also automatically start the song playing.

AutoDance The AutoDance setting controls whether the dance sequence associated with a song is automatically started when the song is played.

Resize* Opens the Resize Menu.

Say Steps When this option is enabled, the system will announce each step in the dance sequence in Owner chat. The system announces the time stamp, how long the step lasts, command, and animation name or command parameters. Use this feature to fine tune or audit your dance sequence(s).

W2Gether This option is only present if the user has set a Watch2Gether room and API Key in the configuration notecard (.config). When enabled, the system will use Watch2Gether to play videos and audio. If disabled, the system plays the selected URL directly.



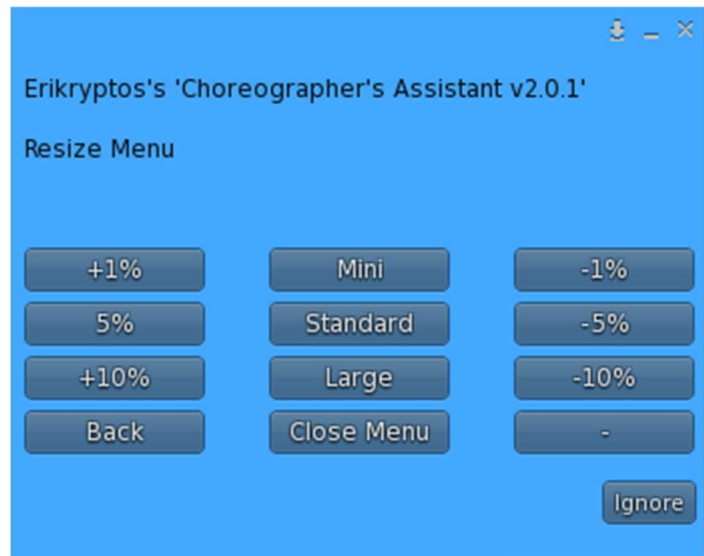
Note: Clicking on an option will toggle its state between on and off.

Resize Menu

You may resize the Choreographer's Assistant using the Resize Menu. The system maintains two separate sizes. One, when rezzed in world, and second, when worn as a HUD. Any changes to the size of the object while rezzed in world will have no effect on the object's HUD size, or vice versa.

Positive percentage amounts will increase the size of the object, while negative amounts will decrease it.

Three default sizes, Mini, Standard, and Large are provided for your convenience.



Slice Menu

When choreographing, the choreographer might wish to use just the beginning of an animation, or just the ending, or just a few seconds from the middle of the animation. But finding the exact time to start or end the animation can be a frustrating exercise using trial and error to locate the best “fragment” of the animation to use.

The Slice feature of the Choreographer's Assistant is designed to help take the guesswork out of identifying the precise portion of the animation to use in the choreographer's creation.

Selecting the Slice* menu option from the Main menu or clicking on the Slice Icon opens a list of all animation files (not illustrated) contained in the Choreographer's Assistant contents.

To analyze an animation, first locate the animation using the navigation keys and then select the number of the animation.

After selecting an animation for analysis, the Slice menu is displayed.

At the top of the menu, the name of the selected animation is listed.

In the center “Currently adjusting” indicates whether we are adjusting the time the animation starts, or the time the animation ends (stops).

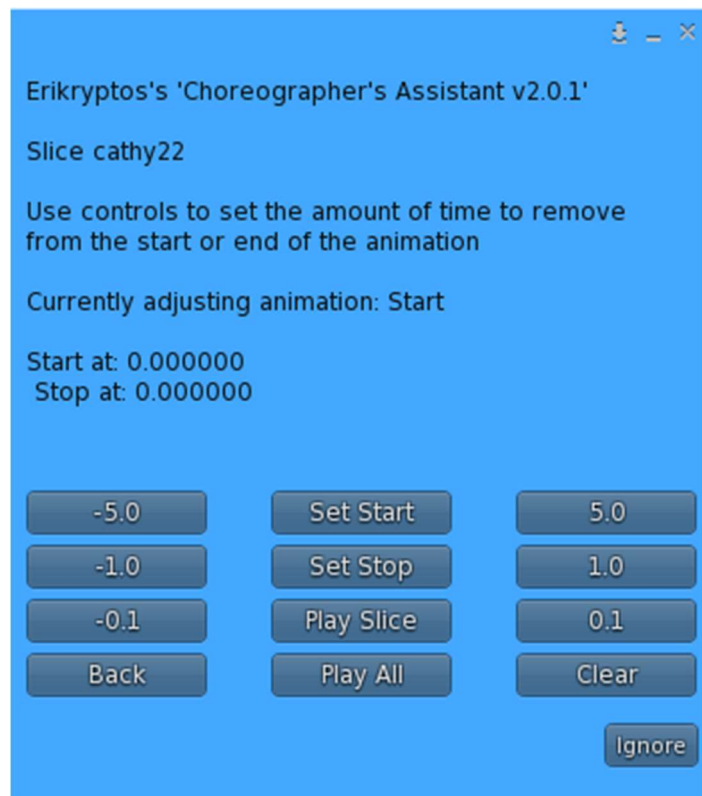
The “Start at” and Stop At” entries in the body of the menu display the currently selected start and end times for the slice in seconds.

IMPORTANT: Before beginning to analyze an animation, it's a good idea to inspect the animation's properties in inventory and jot down the length of the animation.

To illustrate by example, consider the case where we want to use just the first part of an animation, and want to find the best moment to stop the animation. In that case we want to “Start” animating at 0.0 seconds, and “Stop” the animation sometime afterwards.

1. Click “Clear” to reset start/stop to 0.0.
2. Click “Set Stop”.
3. Click the values for Plus/Minus seconds to set the approximating ending.
4. Click “Play Slice”.

IMPORTANT: You must be standing on a Dance Stand for the animation to animate your avatar.



The animation will play beginning at 00 seconds and stop playing at the time you selected. At this point, you can use the +/- time settings to move the ending point forward or backward and replay the slice until you are satisfied you identified the fragment of the animation to include in your choreography.

Isolating the ending of an animation is similar but requires you to know the length of the animation.

1. Click "Clear" to reset the stop/start to 0.0.
2. Click "Step Stop" to adjust the ending point.
3. Click the values for +/- time to set the ending time to the length of the animation.
4. Click "Set Start" to adjust the starting point.
5. Use the +/- time values to set the approximate starting time.
6. Click "Play Slice".

In this case, the Choreographer's Assistant will play a static standing animation between the times 0.0 and the time you set. When reaching the starting time, the static standing animation is stopped, and the animation will start playing from that point in time.

Isolating the middle portion of an animation is like the previous examples. However, in this case you are setting a start time greater than zero and setting a stop time prior to the end of the animation.

When playing a slice from the middle of an animation, the Choreographer's Assistant will play a static standing pose until the slice begins, then play the animation from the starting time until it reaches the designated stop time.

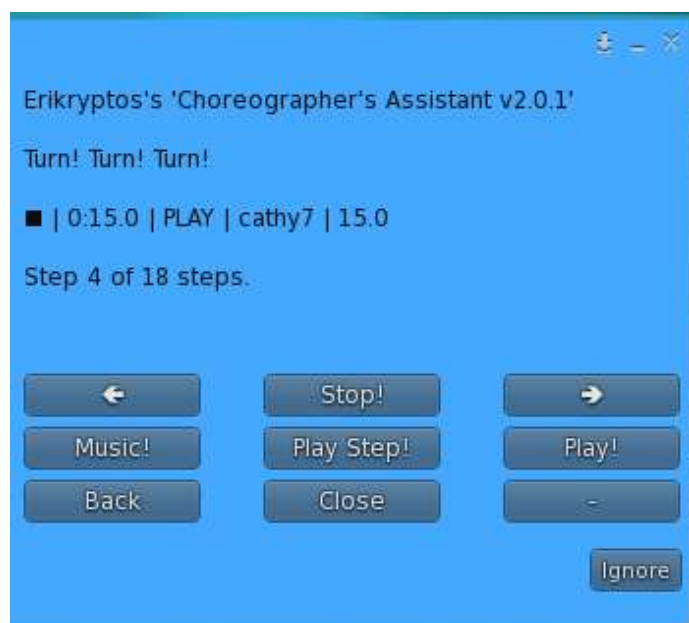
Steps Menu

A dance sequence can be difficult, and time consuming to test or fine tune when the choreographer must play the entire sequence from beginning to end each time she wants to make an adjustment. Or simply wants to confirm that a single animation in the series is starting at "just" the right time.

This feature is designed to permit the choreographer to "step" through her creation, one step at a time. For each step, the choreographer can play the selected step in isolation, or play "from" the selected step to the end of the dance.

The Steps Menu can be accessed from the Main Menu, or by clicking on the Steps Icon on the face of the Choreographer's Assistant.

At the top of the Steps Menu, the system displays the current dance sequence, the time stamp for the step, the command for that step, animation name. and duration for the animation.



Use the Left or Right Arrows to navigate to the desired step.

Note: For our purposes, a “Step” is all the commands in the dance sequence that share the same time stamp. Therefore, a single “Step” might include multiple commands.

After the step is selected, the following commands are available:

Music! This command will instruct the Choreographer's Assistant to start the video or audio at the time specified for the step. This feature can be very useful to verify that the animation is starting exactly when the choreographer desires in relation to the song they are choreographing.

IMPORTANT: Playing media from a point in time is not compatible with Watch2Gether. If you are using the Watch2Gether system, use the Settings* menu to temporarily disable Watch2Gether and access videos/audio directly from YouTube to use this feature.

If an ad plays, you can wait for the ad to finish, or click Music! again to try and skip the advertisements. In any event, when the audio starts, it will start at the time stamp for the step.

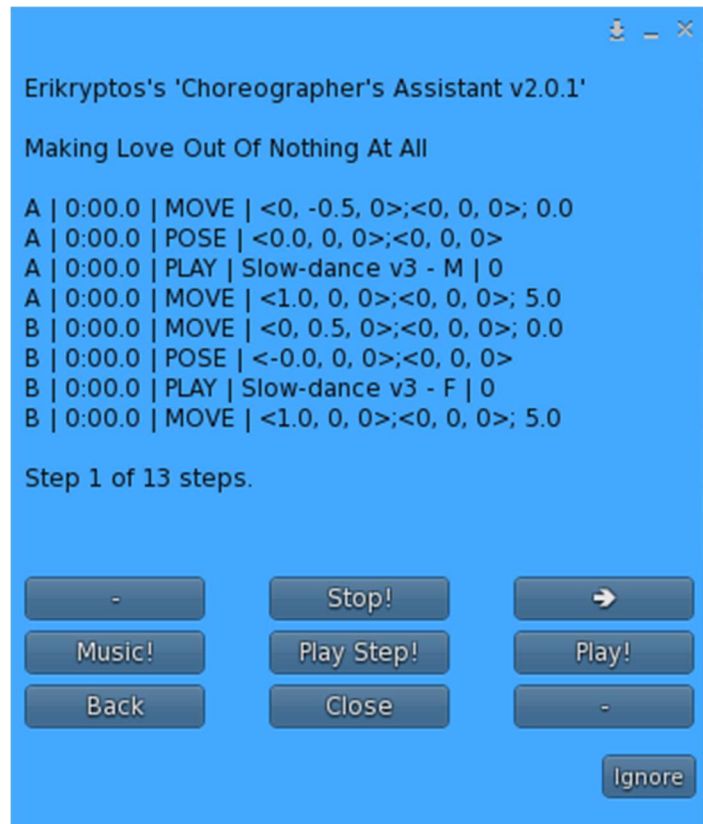
Play Step! Clicking this option will play the commands for the selected time stamp. If this includes an animation, the animation will play for the duration specified by the choreographer in the dance sequence.

Play! Plays the dance sequence from the current step to the end of the dance sequence.

Stop! Stops the currently playing step and/or media.

Combining the ability to start the audio at any point in the dance sequence with the capability to start the dance sequence at the same point-in-time is a powerful tool to assist the choreographer to fine tune her artistic creation.

In the case where the dance sequence contains multiple parts, all the parts playing at the same time stamp will be displayed as illustrated.



Watch 2 Gether

Watch2Gether is a social video website that allows you to watch videos and other content in-sync with others. For Second Life, this means that two avatars viewing the same video or audio will hear and see the contents in sync with each other, automatically compensating for each avatar's viewer, network speed and latency.

We provide an integration with Watch2Gether, a unique web service that is designed to synchronize playback of videos and music.

Using the optional Watch2Gether service not only improves synchronization between each user; it also improves the experience by reducing ads and clutter. We strongly recommend trying Watch2Gether to improve incorporating music audio and videos in Second Life.

To integrate Watch2Gether into your Choreographer's Assistant you'll need to:

Create a free account. https://w2g.tv/auth/sign_up

Once you've created your account, create a room to share audio/videos with others.

https://w2g.tv/users/current_user

Copy the link to your shared room. Open your room and copy the shared link. It will look something like this:

<https://w2g.tv/?r=t6q3riq9nznbszq4d>

Navigate to your account profile and select "</> Tools / API". If an API key is displayed, copy it. If not, click "new" to create one. Your API key. It will look something like this:

zs60bz35gu55dn7x1xesaqc7e3hx5j7s59x9txai0kwrsf9dm0cjwqhrrpye1p1qd

This (very long string) is your API Key.

Now that you've gathered this information, open the contents of Choreographer's Assistant, and edit the ".config" notecard:

- Enter your shared room and API key where indicated.
- Save the changes to the notecard.

The system will automatically read your Watch2Gether room (URL) and API key to enable the Watch2Gether service.

The first time you play an audio/video using Watch2Gether, the system will display a prompt: "Join Room" on the Media Panel. Click on "Join Room" (it may take two clicks). This action will not be required again until your session with Watch2Gether expires.

Note: The system does NOT support syncing videos on Watch2Gether on unsupported sites that require the W2gSync browser plug-in.

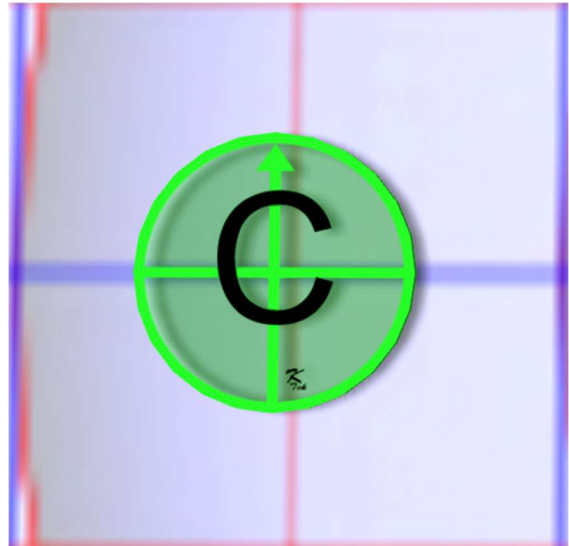
Dance Stands

The Choreographer's Assistant is delivered with five (5) Dance Stands labeled A through E.

- KryptoTek Dance Stand A
- KryptoTek Dance Stand B
- KryptoTek Dance Stand C
- KryptoTek Dance Stand D
- KryptoTek Dance Stand E

The "names" given to the Dance Stands are unimportant. Users may rename them if desired. Dance Stands are shipped modify, copy, no-transfer. Users are free to change textures, colors, etc.

However, the description of each stand is used by the system to match with the name of the dance sequence for that part. By default, they are also lettered A through E.



The arrow on the dance stand designates the "forward" direction for the stand. By default, when a dancer stands on the stand, they will face in this direction.

Each dance stand contains a script and ".config" notecard. The ".config" notecard contains the following default parameters:

- Remote Channel = -30231120
- Server Channel = -30231116

The "Remote Channel" is the channel that Dance Stands listen on for information and commands issued by the Choreographer's Assistant. Conversely, the Choreographer's Assistant listens on the Server Channel for information transmitted from the Dance Stand to it.

In general, these values can be left to their default values. However, in the case where a choreographer wants to have multiple copies of the Choreographer's Assistant inworld in the same region (sim) at the same time, it's necessary to have a method to pair one set of dance stands to one Choreographer's Assistant, and another set of dance stands to the second Choreographer's Assistant.

In that case:

- Rez the second Choreographer's Assistant in world and edit its .config notecard, replacing the values for Remote Channel and Server Channel with new values.
- Rez the second set of Dance Stand(s). Edit the ".config" notecard for each of the dance stands for use with the second Choreographer's Assistant with the same values.

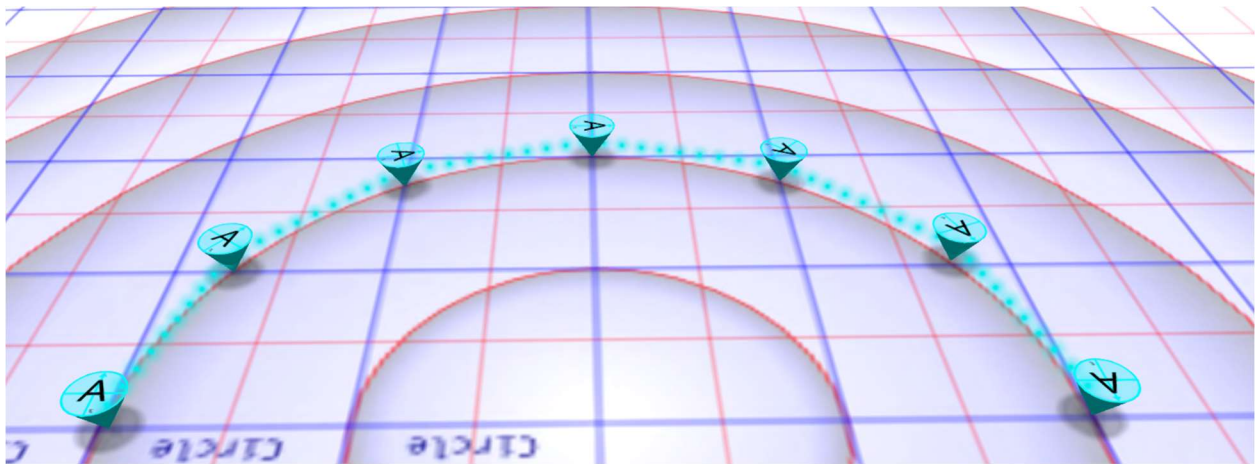
NOTE: There is no conflict for separate owners to use their own copies of the Choreographer's Assistant in the same region (sim) at the same time, nor any need in that case to update or change channel numbers.

Waypoints

Waypoints are provided to assist the choreographer to map the movement of the dancer(s) during a dance sequence. To use waypoints:

1. Rez a waypoint from inventory. Position and rotate the waypoint to represent the starting position and rotation of the dancer.
2. Rez a 2nd waypoint from inventory. Position and rotate the waypoint.
3. Rez the 3rd through final waypoint. In each case, position and rotate the waypoint as needed.
4. When the series of movements is completed, touch the first waypoint. It will output in owner chat the series of MOVE commands that represent the movements of the dancer.

In the example below, the choreographer has designed moving the dancer in a half-circle with the dancer facing the opposite direction at the end of the sequence.



Touching the first waypoint would output the following movement commands:

```
[16:24] KryptoTek Waypoint A: 001 ● 0:00.0 | MOVE: <-0.20000, -1.00000, 0.00000>; <0.00000, 0.00000, -38.00000>; 0.0
[16:24] KryptoTek Waypoint A: 002 ● 0:00.0 | MOVE: <-0.70000, -0.70000, 0.00000>; <0.00000, 0.00000, -35.10000>; 0.0
[16:24] KryptoTek Waypoint A: 003 ● 0:00.0 | MOVE: <-1.00000, -0.30000, 0.00000>; <0.00000, 0.00000, -16.90000>; 0.0
[16:24] KryptoTek Waypoint A: 004 ● 0:00.0 | MOVE: <-1.00000, 0.30000, 0.00000>; <0.00000, 0.00000, -45.00000>; 0.0
[16:24] KryptoTek Waypoint A: 005 ● 0:00.0 | MOVE: <-0.70000, 0.70000, 0.00000>; <0.00000, 0.00000, -22.50000>; 0.0
[16:24] KryptoTek Waypoint A: 006 ● 0:00.0 | MOVE: <-0.30000, 1.00000, 0.00000>; <0.00000, 0.00000, -22.50000>; 0.0
```

These commands can then be copied into the “.dance” notecard and inserted at the appropriate points in the overall choreography. Note that the choreographer must set the timestamp and duration for each MOVE command.

Important: It is not necessary to remove the extra text prior to the timestamp. The Choreographer's Assistant will automatically detect and remove all text up to and including the “●” symbol when interpreting these lines in the “.dance” notecard.

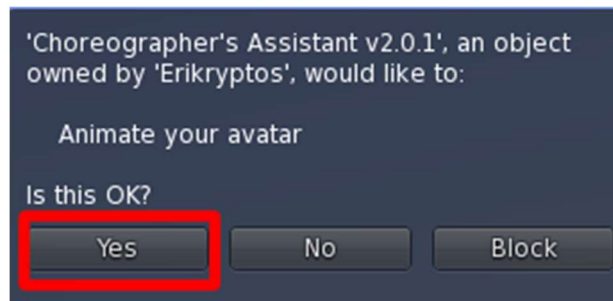
Troubleshooting

I'm not dancing!

Did you accept permissions to Animate your avatar?

For the system to animate your avatar you must first (sit) stand on one of the Dance Stands. Upon sitting, the system will request permission to "Animate your avatar". You must accept the request by clicking "Yes".

If you don't see the permissions dialog, check to see if it is hidden behind other windows on your screen. It usually appears in the top right corner of the screen.



Did you click the dance icon?

You must click the dance icon () to start the dance sequence.

Does the dance stand have a part in the dance sequence?

Only dance stands with parts in the dance sequence will animate. For example, if the dance sequence is for parts "A" and "B", and you are standing on "C", you will not be animated.

Does the name of the song in the playlist exactly match the name of the dance in the ".dance" notecard?

If the title of the song is displayed in blue text (instead of black) and the dance icon is greyed out as illustrated below, then there is a difference in spelling, or no dance exists for the playlisted song.



Did you change the values for "Server Channel" or "Remote Channel"?

If you customized the values for Server and/or Remote channel numbers in the .config notecards, double check these values.

I don't hear music!

Did you Enable Music by clicking on the media panel?

When you look at the face of the Choreographer's Assistant, do you see "Enable Music" displayed on the Media Panel?



In that case click on the sign to enable Prim Media. If nothing appears to happen try clicking on the ground or another object and then click the face of the media panel again. When media has been enabled, the media panel will change to:



Did you click on the Play Music icon?

You must click on the Play Music icon (►) to start playing the media. Click on the icon. There will be a short delay while your viewer contacts the host website and begins downloading the video/audio.

Are you wearing your headphones?

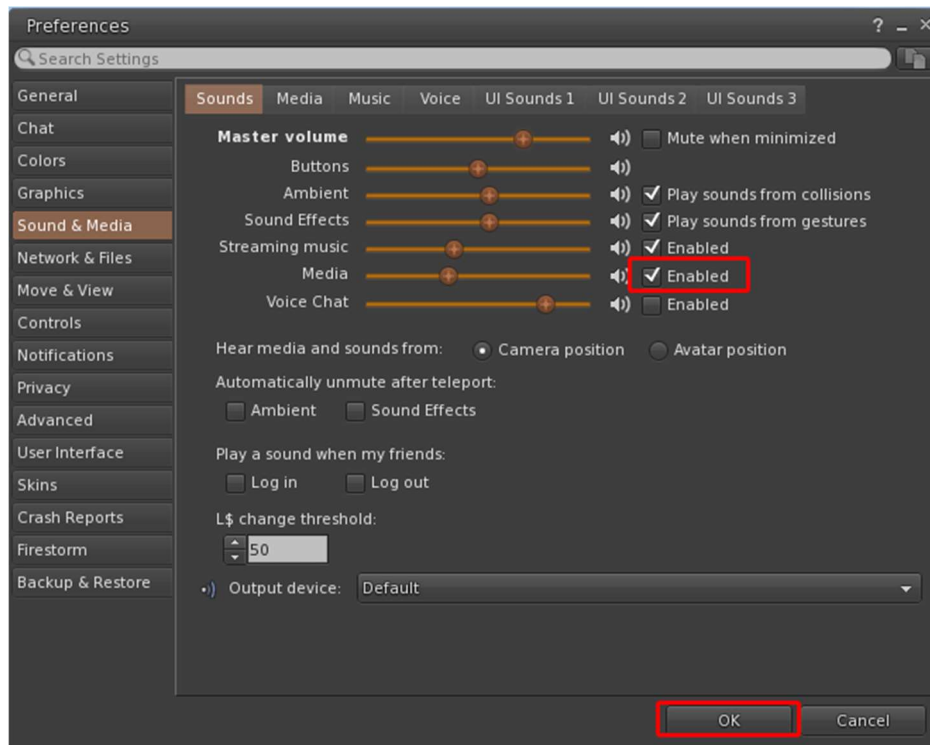
We know. But double check. If you are using headphones, make sure that they are plugged in and that you are wearing them.

Is sound muted?

Make sure that you haven't muted all sounds in Second Life. If you have, unmute and try again.

Is Meda enabled for your viewer?

Verify that Media is enabled for your Second Life viewer. Visit Avatar > Preferences > Sound & Media > Sound and confirm that “Media” is checked as enabled.



Avatar > Preferences > Sound & Media > Sound

Frequently Asked Questions

- Q.** How many dancers does the Choreographer's Assistant support?
- A.** The Choreographer's Assistant, ships with the capability to support up to 20 dancers.
- Q.** Can the Choreographer's Assistant support more than 5 parts?
- A.** Yes. Rez additional dance stands and change the description of the dance stand to support additional parts. For example, for 6 parts, add a dance stand and set its description to "F". For a seventh part, rez a dance stand and set its description to "G". Use the corresponding letters in the ".dance" notecard.
- Q.** If my dance sequence only has one part, is it necessary to use a part letter and corresponding dance stand?
- A.** No. No part letter is required in that case, and any dance stand will play the dance sequence.

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