

Life Forms/DanceForms PowerMoves 1 & 2

The Ultimate 3D Animation Library for Life Forms/DanceForms Users

Welcome!

PowerMoves will save you time, enhance your productivity and ignite your creative ideas! We have include a wide selection of animations for you to use, modify, and map to your 3D models. In PowerMoves 1, the single and multi-figure animations have been keyframed with Life Forms and other in-house software. In PowerMoves 2, we bring you an additional 120 motion capture sequences (as well as the 40 motion capture sequences found with Life Forms® 3.0) and five new Life Forms-ready models. Using the large set of import and export plugins available in the Life Forms® program, the animations may be used to work with jointed polygonal models or, bones and skinning techniques that you may have in your 3D toolsuite.

Systems Requirements

PowerMoves is created for use with: Life Forms 5 and DanceForms 2 for the Macintosh or Windows platforms.

PowerMoves I Animation Folders:

1. **ADVENTURES.** Moves with an attitude. This is a collection of daring moves! The animations are keyframed in Life Forms so that they are easy to modify. Check out the amusing First Jump Skydiving scene.
2. **DANCE.** A collection of Ballet, Modern and Funky dance moves for single and multi-figures.
3. **GESTURES.** A collection of common gestures and secondary movements (e.g. scratching, weight shifts, impatient toe tapping) to add realism and humor to your animations. These keyframed sequences are easy to change and can be combined to produce longer sequences.
4. **SPORTS.** A rather unusual collection of sporting sequences from golf and swimming to ball rolling.
5. **OFFICE WORK MOVES.** A variety of office and work-related moves. They are particularly useful for architectural visualization.
6. **MUSICAL MOVES.** A starter set of motions for playing various instruments.
7. **WALKS.** This walk collection includes a set of basic and funny walks. Each walk has several variations so that the number of animations in this collections is over 500. The walks are divided into FIXED, DYNAMIC and VELOCITY categories. We have also included a database of normal walks along a variety of curved paths.
8. **RUNS.** Running sequences are divided into FIXED, DYNAMIC and VELOCITY categories. Running sequences vary according to parameters such as toe or heel strike, arm swing, pelvis tilt, etc. FIXED walks keep constant parameter values for the duration of the run sequence. DYNAMIC runs start with a set of values but will have one or more of its parameters changing during the walk sequence (e.g. arm swing range between a

factor of 1 and 5 creates a tight running form). VELOCITY runs are created by specifying a desired velocity.

9. **WAVES.** The waves collection contain animations of a figure walking or running and waving its hand. These animations are great for creating jogging and pedestrian crowd scenes!
10. **PARTY CLUSTERS.** Party Clusters are multi-figure animations that can be easily moved together, duplicated and tweaked to create a crowd of clusters. Creating a party scene can be very easy - just add a cluster of figures to your 3D environment!
11. **LOGROLLING.** Something unusual for those seeking an entertaining set of sequences.
12. **DEMO ANIMATIONS.** This folder of animations shows the different applications of Life Forms. For example, there are demos for mapping animations from the Default Human Figure to a BioVision hierarchy to reduce data before export (e.g. to interface with a bones & skinning program), editing and integrating motion capture data, mapping movement to boxes and alphanumeric letters, etc. Check out our demo animations to get ideas for your projects.

PowerMoves I Models Folders:

Our PowerMoves Starter Models are basic shapes you can use as a base for creating your own 3D models. These starter models lets you work in Life Forms or DanceForms with simple models. The basic shape models can be elaborated further in an external modeler. Use these models to create animations to be exported to match a similar model in another program, or to drive skinning functionality in another program. The basic shape models are also provided in 3DS format. Starter models include:

- | | |
|-------------------|--|
| 1. Basic.lfa | Basic Biped Starter Model |
| 2. BalletA.lfa | Female Ballet Model with two joints in the spine (lower and upper back) |
| 3. BalletB.lfa | Female Ballet Model with three joints in the spine (lower, mid and upper back) |
| 4. BalletC.lfa | Female Ballet Model with fully articulated spine to match the Default Human Figure |
| 5. 2head2arms.lfa | Basic Biped with an additional head for creating monsters. Both heads of the 2head2arms.lfa model can be mapped to the same body part (e.g. the head of the default human figure). |
| 6. 2head4arms.lfa | Basic Biped with an additional head and set of arms. This is one of the most frequently requested model! |
| 7. Dog.lfa | Basic quadruped which can be mapped easily to work with the Life Forms walk generator to create funny cartoon style walks for your dog model. |
| 8. Flyingbug.lfa | Six-legged flying insect. Note that the legs were modelled straight down to correspond with the legs for the default human figure in order to facilitate mapping between the two models. You can reposition the legs in Life Forms to set the default shape or neutral pose for the model. |
| 9. Spider.lfa | Eight-legged spider. |
| 10. FemaleA.lfa | Basic casual female model with two joints in the spine (lower and upper back). |

- | | |
|-----------------|--|
| 11. FemaleB.lfa | Basic casual female model with three joints in the spine (lower, mid and upper back) |
| 12. FemaleC.lfa | Basic casual female model with fully articulated back to match the default human figure in Life Forms. |

Important *Note that it is easier to animate with the default human figure and map the animation to a model with a fully articulated back (e.g. FemaleC.lfa), than to animate the model directly . Life Forms can automatically adjust the rotation value of the back joints of the default human figure when you drag one of the back joint, but cannot do this for custom models.*

Note that we have included two furniture items (chair and table) in our models folder. Simple furniture items are useful as a reference for animating figures (e.g. sitting). Any object may be imported into Life Forms if it is in a geometry format supported by the Life Forms set of import plug-ins.

Detailed Listing of PowerMoves 1 Animation Folders

Adventures

1. Acronautman.lfa
2. Apeman.lfa
3. Backstepping_In_Place.lfa
4. Bee Attack.lfa
5. Car Driver.lfa
6. Cheering Fool.lfa
7. Dressup Joe.lfa
8. Faceplant.lfa
9. Fainter.lfa
10. Fall.lfa
11. Flying.lfa
12. FlyingDuo.lfa
13. GunFight.lfa
14. Hauling_Rope.lfa
15. Jumping_Fool.lfa
16. Karate1.lfa
17. Karate2.lfa
18. KarateFight.lfa
19. Kidsplay.lfa
20. Kneel.lfa
21. KnobBros.lfa
22. Losing_Balance.lfa
23. Magic.lfa
24. Pulling_Rope.lfa
25. Punch.lfa
26. Rescue.lfa
27. Run_and_Jump.lfa
28. Skydiving FirstJump.lfa

- 29. SkydivingScenario.lfa
- 30. SwordFight.lfa

Dance

- 1. BoxStep Duo.lfa
- 2. Dance Demo.lfa
- 3. Dance Variations.lfa
- 4. FallingDance.lfa
- 5. Fandancers.lfa
- 6. FloatDance.lfa
- 7. Funk.lfa
- 8. Funk2.lfa
- 9. Funky Tap.lfa
- 10. IndiaDance.lfa
- 11. Intro.lfa
- 12. Macarina.lfa
- 13. Modern.lfa
- 14. Popping.lfa
- 15. Popping2Reverse.lfa
- 16. Popping2.lfa
- 17. Popping3.lfa
- 18. Rib_Isolations.lfa
- 19. Rock_Concert.lfa
- 20. Soul Catcher.lfa
- 21. Waltz.lfa

Dance (Ballet)

- 1. chasse.lfa
- 2. coupe.lfa
- 3. fouette-entournant.lfa
- 4. fouette.lfa
- 5. grand_r.de.j_derriere.lfa
- 6. pirouette_dedans.lfa
- 7. pirouette_dehors.lfa
- 8. assemble.lfa
- 9. ballone.lfa
- 10. ballotte.lfa
- 11. echappe.lfa
- 12. grand-jete.lfa
- 13. grand_tour_en_l'air.lfa
- 14. pas-de-chat.lfa
- 15. saute-changement.lfa
- 16. sissone.lfa
- 17. soubersaut.lfa
- 18. tempsleve_glissade.lfa
- 19. 4thpos.lfa

20. ballet_bar_1.lfa
21. ballet_bar_2.lfa
22. ballet_bar_3.lfa
23. battement_en_cloche.lfa
24. battement_fondu.lfa
25. brise.lfa
26. degage_left.lfa
27. developpe.lfa
28. grand_battement.lfa
29. grand_r.de.j_dehors.lfa
30. jump_side.lfa
31. jump_static.lfa
32. petit_battement.lfa
33. plie.lfa
34. r.de.j.enl'air_dedans.lfa
35. r.de.j.enl'air_dehors.lfa
36. rond-jambe-terredehors.lfa
37. rond_jambe_terre_dedans.lfa
38. tendue_left.lfa

Gestures

1. Clap and Cheer.lfa
2. Clap and Jump.lfa
3. Clap Fast.lfa
4. Clap High.lfa
5. Clap Low.lfa
6. Clap Overhead andJump.lfa
7. Clap Overhead.lfa
8. Clap Politely.lfa
9. Clap to the Side.lfa
10. Cough Quietly.lfa
11. Crawler.lfa
12. Crawler2.lfa
13. Crawler3.lfa
14. Duck Quickly.lfa
15. FootTapImpatiently.lfa
16. FootTap.lfa
17. Gathering.lfa
18. Get up fromFloor.lfa
19. Glance in ActionStance.lfa
20. Look and Go Left.lfa
21. Look and Go.lfa
22. Look and Sigh.lfa
23. Look onTippytoes.lfa
24. Look.lfa
25. Lookaround.lfa

26. Lookaround2.lfa
27. Lookup.lfa
28. Look_wave_cry.lfa
29. Making_a_Point.lfa
30. Nodding Talker1.lfa
31. Nodding Talker2.lfa
32. Oldman Falls.lfa
33. Oldman.lfa
34. Reach Up.lfa
35. Scratch Head.lfa
36. Scratch Side.lfa
37. Shift Weight.lfa
38. Shift Weight2.lfa
39. Shift Weight3.lfa
40. Shift Weight4.lfa
41. Shift Weight5.lfa
42. Step to Left.lfa
43. Step to Right.lfa
44. Shrug.lfa
45. Sit Drink Drop.lfa
46. Sit Drink Think.lfa
47. Sneezer.lfa
48. Speech.lfa
49. Stand and Wait.lfa
50. Stumble1.lfa
51. Throw Stone.lfa
52. Waving FromTrain.lfa
53. Wipe Head andRest.lfa

Musical Moves

1. flutist_wave.lfa
2. guitar_sync.lfa
3. lazy_flute.lfa
4. pianist.lfa
5. violinist.lfa

Office Work Moves

1. ActiveTalker.lfa
2. ActiveTalker2.lfa
3. Book_reader.lfa
4. Bricklaying High.lfa
5. Bricklaying Low.lfa
6. Calmwalk.lfa
7. Circletothelleft.lfa
8. Circlewalk.lfa
9. Filing.lfa

10. Handshake_badge.lfa
11. Keyboarding.lfa
12. Open Door.lfa
13. Photocopying.lfa
14. Sitting.lfa
15. Tea_Drinker.lfa

Runs

1. armout.lfa
2. armswing.lfa
3. bounce.lfa
4. elbow.lfa
5. foot_angle.lfa
6. hipswing.lfa
7. kneeswing.lfa
8. knee_bendtoeoff.lfa
9. overstride.lfa
10. pelvis_displace.lfa
11. pelvis_sway.lfa
12. p_swing.lfa
13. shoulder.lfa
14. standard.lfa
15. steplength.lfa
16. torsosway.lfa
17. torsotilt.lfa
18. velocity.lfa
19. armswing.lfa
20. beeattack.lfa
21. busywaiter.lfa
22. crouch.lfa
23. downhill.lfa
24. energetic.lfa
25. handsdown.lfa
26. highstride.lfa
27. jog.lfa
28. lope.lfa
29. makingtracks.lfa
30. military.lfa
31. pep.lfa
32. prance.lfa
33. skip.lfa
34. sprint.lfa
35. standard.lfa
36. twinkletoe.lfa
37. twisty.lfa
38. uphill.lfa

39. velocity10.lfa
40. velocity11.lfa
41. velocity12.lfa
42. velocity13.lfa
43. velocity14.lfa
44. velocity15.lfa
45. velocity16.lfa
46. velocity17.lfa
47. velocity18.lfa
48. velocity19.lfa
49. velocity2.lfa
50. velocity20.lfa
51. velocity21.lfa
52. velocity3.lfa
53. velocity4.lfa
54. velocity5.lfa
55. velocity6.lfa

Sports

1. golfswing.lfa
2. grip.lfa
3. putting.lfa
4. short_approach.lfa
5. back-diveroll.lfa
6. back_handspring.lfa
7. bigflip.lfa
8. cartwheel.lfa
9. dive_roll.lfa
10. flip-3.lfa
11. flip_back.lfa
12. floor_routine.lfa
13. floor_routine2.lfa
14. gymflips.lfa
15. gymnastics-1.lfa
16. gymnastics-2.lfa
17. gymnastics-3.lfa
18. gymnastics-5.lfa
19. moreflips.lfa
20. neck-kip.lfa
21. BallRolling GettingOn.lfa
22. BallRolling RightTurn.lfa
23. BallRolling.lfa
24. Batter.lfa
25. Benchpress.lfa
26. Boxer Stance.lfa
27. Boxer.lfa

28. Boxer2.lfa
29. Broadjump.lfa
30. HighJump.lfa
31. Hockeyman.lfa
32. Jump-2.lfa
33. Jump.lfa
34. LongJump.lfa
35. Rowing Machine.lfa
36. Run Basic.lfa
37. Run Start.lfa
38. skate_routine.lfa
39. skating.lfa
40. tripleaxel.lfa
41. triplelutz.lfa
42. triplesalchow.lfa
43. tripletoelop.lfa
44. board-carv.lfa
45. boardslide.lfa
46. ski-long.lfa
47. ski-short.lfa
48. Skiing in Place.lfa
49. tel-shortloop.lfa
50. tel-wide-loop.lfa
51. telturnsleft.lfa
52. telturnsright.lfa
53. backdive.lfa
54. breaststroke.lfa
55. fast_front_crawl.lfa
56. flipdive.lfa
57. slow_front_crawl.lfa
58. snorkler.lfa
59. somersaultdive.lfa
60. SwimRace.lfa
61. backhand.lfa
62. backhand_twohanded.lfa
63. backhand_volley.lfa
64. forehand.lfa
65. forehand_reach.lfa
66. forehand_volley.lfa
67. bump_and_roll.lfa
68. volley.lfa
69. Volleyball_bump.lfa
70. volleyball_spike.lfa

LogRolling

1. Rollerman.lfa

2. Rollerman_Falling.lfa
3. Rollerman_Flat_on_Back.lfa
4. Rollerman_Flat_on_Face.lfa
5. Roll_Backwards.lfa
6. Roll_Forward.lfa

Party Clusters

1. A Small Crowd.lfa
2. ChitChat.lfa
3. Introductions.lfa
4. Joggers_wave.lfa
5. Joiner.lfa
6. Mingling.lfa
7. PartyParty.lfa
8. Sippers.lfa

Walks

1. babysteps.lfa
2. balancebeam.lfa
3. bent.lfa
4. bouncy.lfa
5. cautious.lfa
6. cowboy.lfa
7. funky.lfa
8. highstepping.lfa
9. kickup.lfa
10. longstride.lfa
11. monster.lfa
12. pace.lfa
13. saunter.lfa
14. sillystep.lfa
15. sleepywalk.lfa
16. sneaky.lfa
17. strut.lfa
18. tightrope.lfa
19. tippytoe.lfa
20. wiggly.lfa
21. velocity1.lfa
22. velocity2.lfa
23. velocity3.lfa
24. velocity4.lfa
25. velocity5.lfa
26. velocity6.lfa
27. velocity7.lfa
28. velocity8.lfa
29. velocity9.2.lfa

30. velocity9.lfa

Waves

1. armout.lfa
2. armswing.lfa
3. bounce.lfa
4. elbow.lfa
5. foot_angle.lfa
6. hipswing.lfa
7. kneeswing.lfa
8. knee_bendtoeoff.lfa
9. overstride.lfa
10. pelvis_displace.lfa
11. pelvis_sway.lfa
12. p_swing.lfa
13. shoulder.lfa
14. standard.lfa
15. steplength.lfa
16. torsosway.lfa
17. torsotilt.lfa
18. velocity.lfa
19. armout.lfa
20. armswing.lfa
21. bounce.lfa
22. elbow.lfa
23. heel_toe.lfa
24. hipswing.lfa
25. knee.impact
26. knee_mid.lfa
27. knee_swing.lfa
28. overstride.lfa
29. pelvis_displace.lfa
30. pelvis_sway.lfa
31. pelvis_swing.lfa
32. shoulder.lfa
33. standard.lfa
34. steplength.lfa
35. stridewidth.lfa
36. torsosway.lfa
37. armswing.lfa
38. beeattack.lfa
39. busywaiter.lfa
40. crouch.lfa
41. downhill.lfa
42. energetic.lfa
43. handsdown.lfa

- 44. highstride.lfa
- 45. jog.lfa
- 46. lope.lfa
- 47. makingtracks.lfa
- 48. military.lfa
- 49. pep.lfa
- 50. prance.lfa
- 51. skip.lfa
- 52. sprint.lfa
- 53. standard.lfa
- 54. twinkletoe.lfa
- 55. twisty.lfa
- 56. uphill.lfa
- 57. babysteps.lfa
- 58. balancebeam.lfa
- 59. bent.lfa
- 60. bouncy.lfa
- 61. cautious.lfa
- 62. cowboy.lfa
- 63. funky.lfa
- 64. highstepping.lfa
- 65. kickup.lfa
- 66. longstride.lfa
- 67. monster.lfa
- 68. pace.lfa
- 69. saunter.lfa
- 70. sillystep.lfa
- 71. sneaky.lfa
- 72. strut.lfa
- 73. tightrope.lfa
- 74. tippytoe.lfa
- 75. wiggly.lfa

The Incredible Walks Collection

PowerMoves has a large set of realistic and funny walks for your character animation needs. In addition, we have provided a database of variations on the initial set of distinct walks. Our walking sequences differ by a set of parameters such as stride width, arm swing, pelvis tilt, etc. Our walk collection is divided into three categories: FIXED, DYNAMIC and VELOCITY walking sequences. FIXED walks keep constant parameter values for the duration of the walk sequence. Fixed walks also have different time lengths (*short*, *medium* and *long*) with a choice in starting and stopping (i.e. you may start with your model's feet together or in stride for a walk sequence). DYNAMIC walks start with a set of values but will have one or more of its parameters changing during the walk sequence (e.g. bounciness may range between a factor of 5 and 10 in a fairly bouncy walk). Fixed and Dynamic walk sequences will normally have a *slow* and *fast* version. VELOCITY walks are created by specifying a desired velocity.

To assist in creating crowd scenes for walking figures, there is also a collection of WALKPATH sequences organized by the type of path used in the creating the walking motion. The paths are: circle, half circle, zigzag, Ess (S-shaped), figure eight and wander. The naming scheme is NAME[*tx*][*d*][*r*][*s*][*xn*] where:

- *t* is the number of 360 degree turns completed;
- *d* is the change in orientation in degrees before each step;
- *r* indicates that the walk starts with a turn to the right (clockwise);
- *s* indicates, for wave paths, a change in direction after 180 degrees;
- *n* is the number of steps (defaults to 1 step) after changing orientation.

For example, the circular path, has a basename of CIRC and the following variations for a path to form a large circle walk:

circ10.lfa	circular path with 10 degree turns counterclockwise (to the left) at each step.
circ10r.lf	circular path with 10 degree turns clockwise (to the right) at each step.
circ2x10.lfa	circular path with TWO 360 degrees circles.
circ10x2.lfa	same as circ10.lfa but takes TWO steps at each change of orientation by 10 degrees.
circ10rx2.lfa	same as circ10x2.lfa but in clockwise direction.
circ10x3.lfa	same as circ10x2.lfa but takes THREE steps.
circ10s.lfa	wave path with starting in clockwise direction and switching to counterclockwise at halfway point with 10 degree turns at each step.
circ10rs.lfa	wave path same as circ10s.lfa but starts in the counterclockwise direction.

PowerMoves 2 Models

The PowerMoves 2 models are provided by Viewpoint DataLabs.

Note: An Amanda2 model is provided as a simpler version for animation. When ready for rendering the animation is copied to the original Amanda.

Modelling and Animation Tip: When building custom models, either created from scratch or modification of purchased models, it is necessary to keep each object separate for coloring in Life Forms. For example, in the Amanda model, the eyes, eyebrows, sleeves and pant cuffs are separate objects in order to colour them separately. However, this additional complexity can result in a model and hierarchy that is difficult to animate. One way to handle this complexity is to create a second version of the model for animation purposes such as Amanda2. The Amanda2 model does not have separate parts for each detailed object and thus has a simpler hierarchy for faster joint selection and animation. Once the animation is completed, the animation can be copied from Amanda2 to Amanda and rendered with full control over the details of the model.

The PowerMoves 2 models have been made Life Forms/DanceForms-ready by Credo. We have linked, coloured and mapped the models for motion capture data and for use with existing Life Forms animations in PowerMoves 1.

PowerMoves 2 Motion Capture Sequences

The PowerMoves 2 Motion Capture Library provides an additional 120 motion capture sequences. The motion capture sequences are provided by Viewpoint DataLabs, and converted for viewing with the new Life Forms/DanceForms file browser by Credo Interactive.