

Segment Mass

Default Segment Mass

The default segment masses defined in Visual3D are based on [Dempster's regression equations](#).

The default segment masses (relative to total body mass) are:

foot	0.0145
shank	0.0465
thigh	0.10
hand	0.006
forearm	0.016
upper arm	0.028
pelvis	0.142
thorax/abdomen	0.355
head	0.081
trunk	0.497

Modifying Segment Mass

Segment Mass can be modified under the segment properties tab in Visual3D's model builder.

Segments

Segment Properties

IK Constraints

Right Thigh

Segment Name:

Right Thigh

☒ Kinetic

☐ Kinetic But No Force Assignment

☐ Kinematic Only

Segment Mass:

0.1*Mass

= 8.21

kgs

Segment Length:

0.420917

Meters

Segment Geometry:

CONE

Inertial Values*

	Expression	Value
IXX:	0.12846	0.12846
IYY:	0.12846	0.12846
IZZ:	0.01735	0.01735

Center of Mass (Meters)*

ML :	0*RTH_SEG_	0
AP :	0*RTH_SEG_	0
Axial :	0.464927*RTI	-0.195696

*May be modified for custom geometry

Model File:

rthigh.v3g

Browse

Material File:

Browse

☐ Override Color

Black

Rotate/Scale Graphic Model

Copy Override Color to Active Subject

Modify Segment Coordinate System

Apply

Build Model

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