Rigid Frame Construction Widget

 Frame Construction Widget

Overview

The *Rigid Frame Construction* widget is where you configure and monitor the currently selected frame in the *Body Frames* widget. In the *Rigid Frame Construction* widget, Centroid Offset and the Orientation Offset can be set and applied separately. All the changes can be applied to the existing frames in the project. Frames must first be constructed in the *Rigid Frame Construction* widget before they are ready for use.

Usage

The *Rigid Frame Construction* widget displays the currently selected frame, and has several buttons used to perform various actions on the selected frame, or all frames in the project:

- *Construct Frame*
    - Creates the solution for the currently selected Rigid Frame.
- *Set Home*
    - Matches the orientation of the Rigid Frame to align with the world coordinate's orientation.
- *Reset Frame*
    - Clears the solution for the selected Rigid Frame.

The **Current Position** and **Current Orientation** of the selected Rigid Frame list the current position of the centroid of all LEDs and the current orientation of the selected Rigid Frame. Use the **Centroid Offset** and **Orientation Offset** scroll boxes to change the calculated centroid and offset of the constructed Rigid Frame.

Soft Frames do not have the capability of offsetting the centroid because the centroid of the frame is calculated based on the current position of the LEDs in the frame at any given time, and the centroid may change depending on how many LEDs are visible.

Centroid Offset applies any offsets to the Centroid of the currently selected Rigid Frame after the Rigid Frame is constructed.

To set the centroid offset values

1. On the *X*, *Y*, and *Z,* scroll boxes on the **Centroid Offset** section, click on the *Up* or *Down* arrows to adjust the measurement values.

- **Tips**:
    - Click on the cell then use the mouse wheel to scroll in increments of +/- 0.01m.
    - Click on the cell, press and hold *CTRL* and use the wheel to scroll in increments of +/- 0.10m.

Orientation Offset applies any offsets to the Orientation of the currently selected Rigid Frame after the Rigid Frame is constructed.

To set the orientation offset values

1. On the *Roll, Pitch* and *Yaw* scroll boxes on the **Orientation Offset** section, click on the *Up* or *Down* arrows to adjust the values in the cells.

   - **Tips**:
     - Click on the cell then use the mouse wheel to scroll in increments of +/- 1 degree.
     - Click on the cell, press and hold *CTRL* and use the wheel to scroll in increments of +/- 10 degrees.