CLAIMS:

1. A system, comprising:

a plurality of rotatable track members configured to guide travel of a vehicle, wherein each rotatable track member of the plurality of rotatable track members is configured to individually rotate between a first orientation along a first direction of vehicle travel and a second orientation along a second direction of vehicle travel, wherein the first direction of vehicle travel extends along a first plane, and the second direction of vehicle travel extends along a second plane different from the first plane.

2. The system of claim 1, wherein the first direction of vehicle travel is orthogonal to the second direction of vehicle travel.

3. The system of claim 1, comprising a driving assembly configured to rotate the plurality of rotatable track members between the first orientation and the second orientation.

4. The system of claim 3, wherein the driving assembly comprises a rotatable ~~platform~~disk coupled to a first rotatable track member of the plurality of rotatable track members, and wherein the driving assembly is configured to rotate the rotatable ~~platform~~disk to drive rotation of the first rotatable track member between the first orientation and the second orientation.

5. The system of claim 1, ~~wherein~~ comprising the vehicle, wherein the vehicle comprises a plurality of roller assemblies configured to engage with the plurality of rotatable track members, and wherein each roller assembly of the plurality of roller assemblies is configured to rotate about one or more axes of rotation relative to a chassis of the vehicle.

6. The system of claim 5, wherein the plurality of roller assemblies comprises a first roller assembly configured to engage with a first rotatable track member of the plurality of rotatable track members, and wherein the first roller assembly comprises a first roller and a second roller disposed opposite the first roller relative to the first rotatable track member.

7. The system of claim 1, comprising the vehicle

~~6. The system of claim 1~~, wherein the vehicle comprises a brake assembly configured to stop motion of the vehicle on the plurality of rotatable track members, such that a first axis of rotation of each rotatable track member of the plurality of rotatable track members substantially aligns with a second axis of rotation of a corresponding roller assembly of a plurality of roller assemblies of the vehicle.

~~7.~~ 8. The system of claim 1, wherein at least one rotatable track member of the plurality of rotatable track members comprises a sensor configured to detect a position of the vehicle, a velocity of the vehicle, an acceleration of the vehicle, or a combination thereof.

~~8.~~ 9. The system of claim ~~7~~8, comprising a controller communicatively coupled to the sensor and configured to control rotation of the plurality of rotatable track members based at least on the position, the velocity, the acceleration, or the combination thereof.

~~9.~~ 10. The system of claim 1, comprising:

a first set of tracks extending along the first direction of vehicle travel; and

a second set of tracks extending along the second direction of vehicle travel,

wherein each rotatable track member of the plurality of rotatable track members is configured to align with the first set of tracks in the first orientation and align with the second set of tracks in the second orientation to further define the first set of tracks and the second set of tracks, respectively.

11. ~~10.~~ The system of claim 1, wherein the first direction of vehicle travel is in a horizontal direction relative to the vehicle, and wherein the second direction of vehicle travel is in a vertical direction having a component along a gravity vector relative to the vehicle.

~~11.~~ 12. The system of claim 1, wherein a first rotatable track member of the plurality of rotatable track members is greater in length than a second rotatable track member of the plurality of rotatable track members.

13. The system~~12. A method for controlling multi-dimensional motion~~ of ~~a vehicle, comprising:~~

~~decelerating, via a controller, the vehicle traveling in a first direction along a path to stop the vehicle at a first position along the path~~claim 1, wherein ~~the path comprises a plurality of rotatable track members, and wherein each~~ a first rotatable track member of the plurality of rotatable track members is ~~coupled~~configured to ~~a drive system;~~

~~confirming, via the controller, that the vehicle is stopped on the plurality of rotatable track members at~~rotate from the first ~~position along~~orientation to the ~~path, wherein~~second orientation in a ~~respective~~ first ~~rotation axis of each~~rotational direction, and a second rotatable track member of the plurality of rotatable track members is ~~substantially aligned with a respective second rotation axis of a corresponding roller assembly of a plurality of roller assemblies of the vehicle when the vehicle is stopped at the first position along the path; and~~

~~sending, via the controller, a signal to a drive system to cause the drive system to rotate the plurality of rotatable track members from a first orientation along the first direction to a second orientation along a second direction different from the first direction.~~

~~13. The method of claim 12, wherein the first direction and the second direction are substantially perpendicular with respect to one another.~~

~~14. The method of claim 12, wherein first and second rotatable track members of the plurality of rotatable track members are~~ configured to rotate ~~in opposite directions with respect to one another when the plurality of rotatable track members rotate~~ from the first orientation to the second orientation in a second rotational direction, opposite the first rotational direction.

~~15.~~ 14. The ~~method~~system of claim ~~12~~1, wherein ~~rotating~~ the plurality of rotatable track members ~~causes the plurality of roller assemblies to rotate relative to~~comprises a ~~chassis~~first rotatable track member and a second rotatable track member, wherein the first rotatable track member and the second rotatable track member are disposed on a common side of the vehicle ~~about the first rotation axis and/or~~in the ~~second rotation axis.~~

~~16. The method of claim 12, further comprising tracking, via~~first orientation, and the ~~controller,~~first rotatable track member and the ~~multi- dimensional motion~~second rotatable track member are disposed on opposite sides of the vehicle ~~along~~in the ~~path to determine a~~

~~position, a velocity, an acceleration, or any combination thereof, of the vehicle to facilitate confirmation that the vehicle is stopped on the plurality of rotatable track members at the first position along the path~~second orientation.

~~17.~~ 15. A ride system, comprising:

a plurality of rotatable track members defining a first portion of a first ride path when oriented in a first orientation along a first direction and defining a second portion of a second ride path when oriented in a second orientation along a second direction~~;~~, wherein a first rotatable track member of the plurality of rotatable track members is configured to rotate from the first orientation to the second orientation in a first rotational direction, and a second rotatable track member of the plurality of rotatable track members is configured to rotate from the first orientation to the second orientation in a second rotational direction opposite the first rotational direction;

a ride vehicle comprising one or more roller assemblies configured to facilitate ride vehicle motion along the first ride path and the second ride path; and

a controller communicatively coupled to the ride vehicle and the plurality of rotatable track members, wherein the controller is configured to control the ride vehicle motion and rotation of the plurality of rotatable track members, wherein the controller comprises a processor and a memory device having stored instructions ~~stored~~ thereon, wherein the stored instructions are configured to be executed by the processor, and wherein the stored instructions are configured to cause the processor to:

send a first signal to a braking system to cause the braking system to decelerate the ride vehicle traveling along the first ride path in the first direction to a stopped position on the plurality of rotatable track members, such that each roller assembly of the one or more roller assemblies ~~shares an~~is configured to share a respective axis of rotation with a corresponding rotatable track member of the plurality of rotatable track members; and

send a second signal to a drive system to cause the drive system to selectively rotate the plurality of rotatable track members from ~~a~~the first orientation along the first direction to ~~a~~the second orientation along the second direction, wherein selectively rotating the plurality of rotatable track members causes rotation of each roller assembly of the one or more roller assemblies about the respective axis of rotation.

~~18.~~ 16. The ride system of claim ~~17~~15, wherein the first direction and the second direction are substantially perpendicular with respect to one another.

~~19.~~ 17. The ride system of claim ~~17~~15, wherein the ride vehicle comprises a bogie system configured to generate motion of a cab of the ride vehicle in one of at least six degrees of freedom relative to a chassis of the ride vehicle.

~~20.~~ 18.The ride system of claim 17, wherein the ride vehicle comprises a turntable configured to rotate the cab relative to the chassis.

19. The ride system of claim 15, wherein the one or more roller assemblies are configured to rotate about a first axis ~~extending along the first direction~~of rotation, a second axis ~~extending along~~of rotation, or both, wherein the first axis of rotation is perpendicular to the second axis of rotation.

20.~~direction, or both~~ The ride system of claim 15, wherein the ride vehicle comprises a chassis and a cab configured to accommodate one or more ride passengers, wherein the cab is disposed above the chassis relative to a vertical axis when the plurality of rotatable track members is oriented in the first orientation and when the plurality of rotatable track members is oriented in the second orientation.