**hyperdaq.thordevices**

thordevices.py

Controlls devices from Thorlabs using the Thorlabs.MotionControl.C\_API DLLs that go with the Thorlabs kinesis software.

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***class*hyperdaq.thordevices.BSCRotationController(*serialNum*, *autohome=True*)**

Bases: **object**

A class for controlling a Thorlabs larger size Rotation Stage, but more generally a “Benchtop Stepper Motor”

**GetPosition()**

**GetStageAxisInfo\_MaxPos()**

**GetStageAxisInfo\_MinPos()**

**MoveDeg(*position*, *wait\_forever=False*)**

**wait\_till\_stopped()**

***class*hyperdaq.thordevices.DelayController(*serialNum*, *autohome=True*)**

Bases: **object**

A class for controlling a Thorlabs Delay Stage such as a DDS220, but more generally a “Benchtop Burshless Motor”

**GetPosition()**

**GetStageAxisInfo\_MaxPos()**

**GetStageAxisInfo\_MinPos()**

**MoveMM(*position*, *wait\_forever=False*)**

**MoveToIn(*position*, *time*)**

Move to a position in a given amount of time

**Parameters**

* **position** – the position to move to
* **time** – The amount of time to take, must not cause stage to exceed maximum velocity

**wait\_till\_stopped()**

***class*hyperdaq.thordevices.DualRotationController(*serialDEL*, *serialREF*, *autohome=True*)**

Bases: **object**

A class for controlling two Thorlabs Rotation Stages, such as a K10CR1, in concert to control two laser beam-lines. Highly specialized to dual beam control applications.

**GetPosition()**

**GetStageAxisInfo\_MaxPos(*serial*)**

**GetStageAxisInfo\_MinPos(*serial*)**

**MoveDeg(*positionDelay*, *positionRef*, *wait\_forever=False*)**

**wait\_till\_stopped()**

***class*hyperdaq.thordevices.RotationController(*serialNum*, *autohome=True*)**

Bases: **object**

A class for controlling a Thorlabs Rotation Stage such as a K10CR1, but more generally a “Integrated Stepper Motor”

**GetPosition()**

**GetStageAxisInfo\_MaxPos()**

**GetStageAxisInfo\_MinPos()**

**MoveDeg(*position*, *wait\_forever=False*)**

**wait\_till\_stopped()**