

RTMOTION LCS MK3.1 & LATITUDE MDR

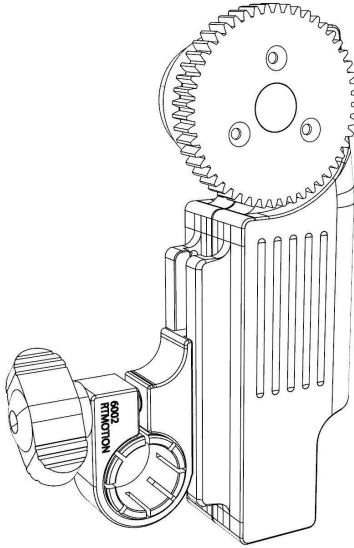
LCS (Lens Control System)
& Accessory Ecosystem

User Guide

REVISION: 2017-07-20 (#23)
rtmotion.com/knowledge

8 MK3.1 Motor

A powerful and quiet lens motor with smooth performance. The brush-less vector-drive gives unparalleled smoothness during high-torque/ slow-speed moves.



Warnings

The motor is a powerful device which is capable of causing injury or damage.

Use caution when touching the drive gear when the device is powered on.

The motor is not to be used on extremely stiff or damaged lenses.

The motor requires no user maintenance. Opening the motor can affect its internal calibration and voids the warranty.

The motor body is used as a heat-sink for the brushless windings, therefore it will get warmer than a brush-type motor.

Attaching to a camera rig

Affix the motor to the rods, but don't yet mesh the drive gear to the lens gear. Rotate the focus ring so that it is not too close to either end stop. Now mesh the gears, and plug the Digital Motor into the Receiver. The Digital Motor will begin its Auto-Calibration Routine.

Accuracy & Electronic Backlash Comp

The MK3.x motor features a high-precision encoder that will never lose steps. If you see evidence of backlash affecting accuracy, please make sure that your mount, rails and camera are extremely rigid, as mounting flex is the main cause of inaccuracy. Unique electronic backlash compensation is calibrated at the factory.

Focus/Iris/Zoom Assignment

The Digital Motor is internally assigned a "Motor Class", which is saved to non-volatile memory. The motor will identify itself to the CONTROLLER via its SERIAL NUMBER (lasered onto the motor back, example: 0500). To change the class of a Digital Motor, or other performance parameters (performance mode, direction of rotation, etc.) please refer to the manual for the Controller.

Specifications

Max Allowable Torque:	2.2Nm
Standard Gear:	0.8 mod, 50 Teeth
Nominal Current:	Approx 0.4-1.1A loaded
Power Requirements:	6.5 - 17V