

## Analog Liquid Crystal Controller

Meadowlark Optics is excited to announce the release of the Model B1010, our new Analog Liquid Crystal Controller. This liquid crystal (LC) driver is designed to integrate with any single (standard) Meadowlark Optics LC device currently offered as well as any nematic Liquid Crystal device compatible with the specifications listed. Independent voltage settings allow easy and repeatable selection of two retardance values. Often, it is desirable to modulate between the two states. For example, switching between quarter-wave and three quarter-wave retardance changes linearly polarized light between left and right circular. A manual toggle allows easy switching between two states. Banana jacks between the knobs allow for continuous voltage monitoring without interfering with LC device connections. Each Meadowlark Optics Liquid Crystal Variable Retarder is supplied with a plot of its actual retardance versus voltage. Using your Model B1010 Controller and this retardance plot ensures accurate retardance to voltage correlation.

### SPECIFICATIONS

<b>Output Voltage</b>	0 to 20 V <sub>AC</sub> RMS, maximum
<b>Fundamental Drive Waveform</b>	2 kHz AC square wave
<b>External Modulation (input)</b>	None
<b>Output Bias</b>	± 10 mV <sub>DC</sub>
<b>Power Requirements</b>	12 V <sub>DC</sub> 200 mA or 9V battery External power supply included 100-240 V <sub>AC</sub> 50-60 Hz, 0.3 A International Plugs
<b>Battery Life</b>	1 hour (intended for convenience, not as a primary power source)
<b>External Dimensions (W x D x H)</b>	3.3 x 6.0 x 2.2 in.
<b>Weight</b>	< 1 lb.
<b>CE Compliance</b>	Compliant

### ORDERING INFORMATION

<i>Item</i>	<i>Part Number</i>
Analog Liquid Crystal Controller	B1010



### Key Features

• • •

- Convenient, stand-alone bench-top operation
- Versatile – compatible with all standard Meadowlark Optics liquid crystal devices
- Out-of-the-box functionality  
Sets up in minutes
- Optional battery supply
- Banana jacks allow for easy multimeter attachment

### Liquid Crystal Suite

• • •

#### Variable Retarders

- Liquid Crystal Variable Retarder
- UV Variable Retarder
- MWIR Variable Retarder
- OEM LCVR

#### Rotators

- Achromatic High Speed Rotator
- Binary Rotator
- Polarization Rotator

#### Shutters / Attenuators

- Achromatic High Speed Shutter
- High Contrast Shutter
- Variable Attenuator

#### Controllers

- Analog Controller
- FLC Controller
- LC Digital Interface Controller
- Temperature Controller
- Two Channel High Voltage Controller