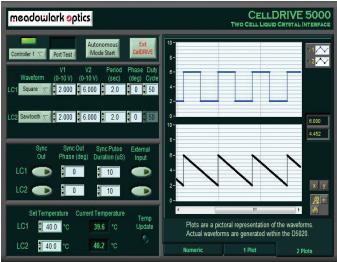


## **LIQUID CRYSTAL DIGITAL INTERFACE — D5020**

The new D5020 Liquid Crystal Digital Interface is the next generation in the evolution of Meadowlark Optics Liquid Crystal Controllers.

The Digital Controller is designed for user functionality and productivity. The D5020 provides a "set and go" function that allows the controller to run autonomously without a computer.



Controlling multiple Liquid Crystal cells has never been easier. CellDRIVE 5000 software provides a separate sync output for each channel as well as temperature sensing and control on both channels.

The 2kHz square wave output can be amplitude modulated with sinusoidal, square, triangle, sawtooth and transient nematic effect waveforms.



## **Key Features**

- Two channels of voltage and temperature sensing & control (TSC)
- USB powered (unless using TSC)
- Waveforms generated internally
- Independent SMB I/O Connectors for each channel
- Multiple external control options
- Includes USB and LabVIEW<sup>TM</sup> code example

SPECIFICATIONS		
Fundamental Drive Waveform	2 kHz AC square wave	
Modulation Amplitude	0-10 V <sub>rms</sub> (20 V <sub>rms</sub> option available	
Modulation Resolution	1 mV (0.155 mV using LabVIEW™ subroutines)	
DC Offset	< 5 mV	
Communications Interface	USB	
LC Cell to Controller Connections	SMA-SMB, 2 m cable length	
CE Compliant		
Dimensions (L x W x H)	5.50 x 5.25 x 1.63 in.	
Weight	1.8 lbs. (with cables)	
Modulation Waveforms	External modulation Input (0 - 5 V) Sinusoidal Triangle Square Sawtooth Transient nematic effect	
Temperature Control (2 Channels)	Active heating/passive cooling within ± 1°C of nominal set point	
Sync Output	TTL, user specified timing and phase	
System Requirements: Windows™ Vista, 7 or 8 Requires LabVIEW™ version 2010 o instrument Library	r higher for use with LabVIEW™	

D5020 PACKAGE	
D5020 Controller Unit	
• Front Panel SMB I/O Connectors	
User Manual	
• USB Cable	
Power Supply and Power Cable	
Temperature Sensing and Control capability	
CellDRIVE 5000 Software	
National Instruments LabVIEW™ virtual     Instrument Drivers	

ORDERING INFORMATION		
Liquid Crystal Digital Interface	D5020	
LC Digital Interface (20V <sub>rms</sub> )	D5020-20V	
SMA to SMB Cables	SMA-SMB	
Sync Cable (SMB to BNC)	SMB-BNC	
Call a Meadowlark Optics Sales Engineer today.		





