

RF Drivers - DS-1 AOTF Controller -

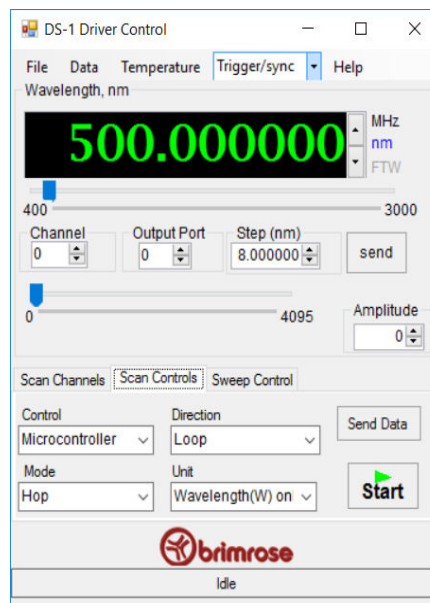


KEY FEATURES

- Control of AO operation in either frequency or wavelength domain
- Wavelength-frequency calibration by customer allowed
- Three scan modes (stop, loop, and bounce) for both sweep and hopping
- Control up to 4 RF output channels
- Sweep or hopping of more than one channel at the same time
- Minimum 8ns frequency sweep interval (8ns increment)
- Minimum 1ms frequency hopping interval
- Standard 1000 frequency hopping steps *
Up to 65000 steps upon customer's Request *
- Synchronization output signal during scan operation (option)
- External trigger input and sync output for frequency sweep/hopping (option)
- Customer accessible configuration file (including frequency and amplitude range control)

* For PC controlled frequency hopping.

DS-1 AOTF Controller



The DS-1 Model AOTF Controller is a high performance radio frequency generator. It provides fast frequency sweep using direct digital synthesizer incorporated into a self-contained case with AC power supply. A modular cable with a DB9 connector interface allows frequency control via the personal computer's serial port. USB connection can also be provided, instead of serial port connection.

Applications for this driver include AOTF wavelength controller for both TeO₂ and Quartz devices and level intensity output of incoherent or coherent light source at any wavelength with built-in feedback loop.

The synthesizer software provides frequency and amplitude control of the output RF signal when the synthesizer is connected to a PC's serial port. Operating systems of Windows 7/8/10 versions are supported. The program has an easy to use graphical interface for controlling the DS-1, which can control up to 4 channels of RF signal.

Brimrose Corporation of America

DS-1 AOTF Controller Specifications

Model No.: DS1-__-__-A-M			
Parameter	Value	Unit	Note
Frequency Range	__ to __	MHz	To match AOTF or AO Device Frequency
Frequency Resolution	1	Hz	
Frequency Stability	+/- 25 optional +/-1	ppm	0 to 40°C, after 15 min warm-up
Output Power	2	Watt	50 ohm impedance
Total Harmonic	< 15	dBc	
Analog Modulation Input - B1	0 - 1	V	B1 or B2 must be added to the model number. If none, please place A.
Digital Modulation Input - B2	0 – 3.3	V	
Trigger Input	0 – 3.3	V	3.3V CMOS compatible
Sync Output	0 - 3	V	3.3V CMOS compatible
Minimum Interval	20ns for linear scan 40 µsec for random scan		
Computer Interface	USB		Serial Communication (COM on PC), ASCII command
Power Supply	+24.0 / 1	VDC / A	
RF Connector	-	SMA	
Option TRI-TRO	Trigger Input / Sync Output		
Enclosure Type	140mm W x 95mm H x 55mm D, OEM Enclosure. Max. temperature: 0-35° C ambient. Mounting flange must be heat sunked. Temperature at the mounting flange must not exceed 60°C.		

If there are any questions please contact Brimrose at office@brimrose.com.