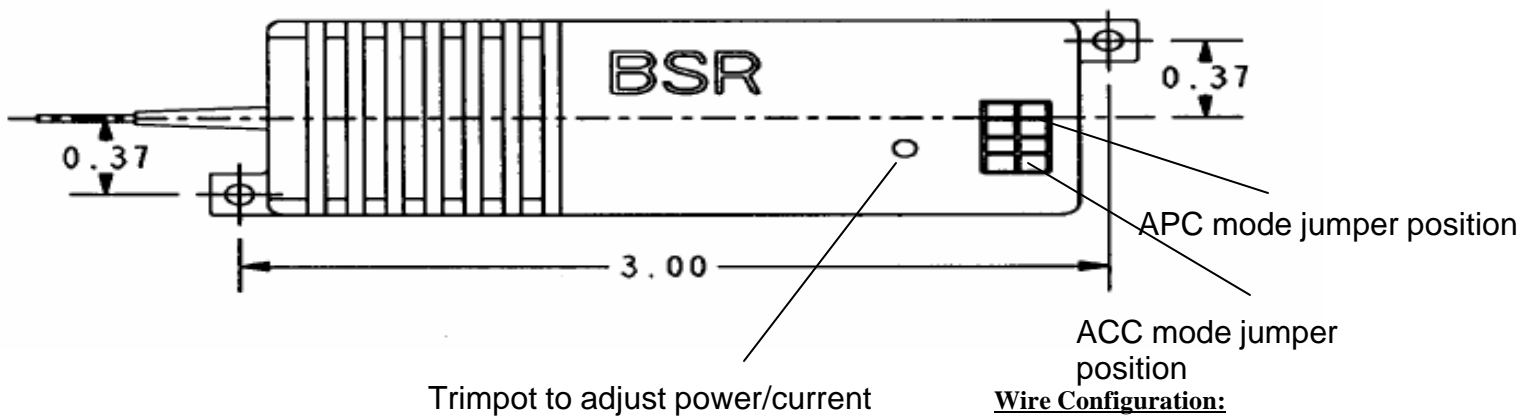


FiberDrive™ without Pins Operation Sheet

This FiberDrive module uses no circuitboard pins, so the interface to your FiberDrive is through three points: The 2 wires for power, the two-pin jumper, and the trimpot. The jumper and trimpot are located as shown below.



Wire Configuration:

1. Yellow: Supply Ground
2. Orange: Supply + 5.0V

NOTE: To prevent ESD damage to the module, a properly grounded wrist strap should be worn whenever moving or touching the jumper.

NOTE: Optical fiber pigtails are easily damaged. Never handle the device by the pigtail, but always grab the module by the metal housing.

NOTE: If your unit comes with a collimator, avoid having to remove the connector. This allows dirt to enter the collimator and also may affect the optical beam quality.

NOTE: If you do not have a collimator, clean the tip of the fiber optic pigtail with isopropyl alcohol and a lint free swab for best results.

NOTE: When inserting or removing the fiber tip from the collimator, or when making and breaking a fiber-to-fiber connection, the optical power should be OFF to prevent damage to the laser diode.

NOTE: The FDRV modules do not normally require a heatsink, but depending on the laser inside, the lifetime can be extended with the use of a heatsink. The bottom of the package in the front of the module, underneath the fins, should make solid contact with a metal heatsink. A small amount of thermal grease is recommended

The FDRV comes from the factory preset in the ACC mode and set for the rated power output. Connect the red wire to the positive terminal of the power supply, and the black wire to GND. The supply should be +5V +/-10%. For supplies other than bench-top units, extra filtering may be necessary. Please see the FiberDrive application note on our website for more details. After turning on the power, the FDRV stabilizes rapidly. The power out may slowly change until the temperature settles. In the ACC mode, the FDRV will maintain a constant current to the laser. This value can be changed by turning the trimpot. Clockwise will decrease the current and decrease the output power.

NOTE: *Care must be used in this mode as it is possible to overdrive the bias current to the laser if the trimpot is turned too far.*

In the APC mode the FDRV works to maintain a constant P_{out} . To change this power level, turn the trimpot with a small screwdriver. Again, turning it clockwise will decrease the power and counter clockwise will increase it.

NOTE: *Care must be used in this mode as it is possible to overdrive the bias current to the laser if the trimpot is turned too far.*

To switch between ACC and APC modes, first turn the trimpot a few turns clockwise to bring the drive current and the output power to a minimum. Then turn off the supply voltage and switch the jumper. Turn on the power supply and slowly bring the current up by turning the trim-pot counterclockwise until the desired level is reached.

NOTE: *When going between either mode, first turn the output power level all the way down in the APC mode, and then power down the unit. This will prevent any current damage upon power up in the ACC mode.*

NOTE: *When switching the jumper just push the jumper onto the pins far enough to make good contact. Pushing the jumper all the way down makes it difficult to switch it at a later time.*

Further information may be found in our application section of our website, <http://www.blueskyresearch.com/technicalnotes.htm>

Thank you and enjoy your FiberDrive module!