Matching Bias Controllers to our LiNbO$_3$ Modulators

## Very Low Noise Sensitivity and Enhanced Stability

LASER COMPONENTS supplies iXblue's modulator bias controllers and board types, showing a very low noise sensitivity yielding a significant reduction of the required dither voltage amplitude.

This new version is characterised by an enhanced stability.  A USB communication and a Graphical User Interface (GUI) are introduced for ease of use.

The MBC are identified according to their application; ANalog, DiGital and PuLse fit the modulator behaviour and characteristics perfectly.  The MBC-AN is designed for ANalog applications where a high purity carrier is required.  They are easy to implement, and fully automated with the auto-set function.

The MBC-DG-LAB controller is a continuously tunable bias controller, meaning it allows operation of the controlled intensity modulator at any point of its transfer function and thus can be used for any telecom and DiGital modulation schemes.  Similarly, the MBC-LAB benefits from an auto-set operation for the Min modes resulting in a simplified use for PuLse applications.

The MBC-IQ-Lab is an electronic system able to control MXIQER modulators in a CS-SSB modulation scheme.  It is based on the minimisation of the beating harmonic of two small dithers.  This system maintains harmonic rejection of optical CS-SSB spectrum better than 40dB over tens of hours.

**More Information**

https://www.lasercomponents.com/uk/product/fiber-optical-modulators/

**The Company**

LASER COMPONENTS specialises in the development, manufacture, and sale of components and services in the laser and optoelectronics industry.  At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 200 employees worldwide.