

# Operation Manual of Acousto-Optic Modulation and Driver (Low Level Conduction Version)

## 1. Usage Method

1.1 Please use the provided power cable to connect the drive power "+24V" port. One end of the power cable is connected to the "+24V" port of the drive power according to the positive and negative levels, and the other end is correctly connected to the positive and negative poles of the 24V power according to the positive and negative marks of the power cable. If the connection is reversed, the drive power may be burned out directly.

1.2 The output power of the driver power supply is adjustable. Generally, the RF output power has been modulated together with the acousto-optic device before delivery from factory. Please do not adjust if there is no special requirement. If you need to adjust the RF output power, use a flat-blade screwdriver to turn the small hole knob at "**Amplitude Modulation**" in driver. Turn Clockwise power decreases, and counterclockwise power increases.

1.3 Please connect the driver "**Power Output**" interface with the provided SMA signal line, and connect the other end of the SMA signal line directly to the acousto-optic device.

1.4 The driver "**Modulation**" interface is used to connect control signal, which is standard TTL digital signals.

**\*Notice: The power supply is low-level conduction, that is, the driver does not need to be connected to the control signal and only needs 24V voltage to work.**

1.5 When using an acousto-optic device, the laser source used must be the same as the laser source described before purchasing, otherwise it will affect the insertion loss of the acousto-optic device during testing.

1.6 When connecting the acousto-optic device to laser source or photoelectric probe, please carefully confirm whether connector of the acousto-optic device is FC/PC or FC/APC. If the connector of the acousto-optic device does not match the connected device, please use an adapter to ensure that the interface is consistent, otherwise it will affect the insertion loss of the acousto-optic device during testing.

## 2. Notification

2.1 Acousto-optic device works under high frequency conditions. **In order to prevent damage, when the driver "Power Output" interface is not connected to a load (that is, the acousto-optic device is not connected), 24V power supply shall not be loaded. This is to prevent the RF driver no load operation, as the high-frequency oscillation will cause damage to the components. Especially after the test is completed, remember to turn off the 24V power supply in time to avoid no load operation.**

2.2 Before powering the driver, be sure to place or fix the driver onto a metal plate with good heat dissipation effect to avoid damage to the internal components caused by high temperature.

2.3 Pay attention and be careful to protect the optical fiber to avoid damage or breakage.

2.4 Put caps on the connectors after use, to avoid wear or contamination of the connector end.

2.5 The product should be handled with care and gentle, to avoid impact.

## 3. Connection Diagram

