

Operational Description

1. The antenna is connected to the transmitter.
2. Start each mission with a fully-charged battery pack.
The RED LED blinks when the battery is low. If using alternative power source, connect through Ext. DC Power Source module supplied.
3. Select the Channel on the transmitter that matches the frequency and settings of your receiver or repeater receive Channel.
4. Unlock the Main Power Switch. Set the Main Power switch to LEFT for illumination, or RIGHT for camera TX only.
5. To operate the spotting laser, press the Laser ON/OFF Button. An LED in the button indicates ON/OFF State. The laser spots for approximately 30 feet, placing a dot in the center of the image. The laser produces a beam strength of less than 5 mW.

Ext. DC Power Source

Use only the Ext. DC Power Conditioner provided. This is a regulated, filtered DC to DC converter suitable for automotive power connection. It has a cigarette-lighter adapter. Other DC power sources can be connected to the Conditioner through the Ext. DC Power Input Jack: Input voltage range: 10.0 to 15.0 VDC., Output voltage: 12 VDC @ 75 Watts.

Output Frequency (MHz)

The transmit frequency can be changed by entering the new desired frequency in this field. Values outside the range supported by a particular transmitter type will be rounded to the highest or lowest supported frequency as appropriate. The transmit frequency may be entered in 1MHz steps.

Modulation Output (same as RF button functionality)

This control is used to turn on and off the RF output. After a configuration change, the output always reverts to OFF. It must be ON for operation.

Either press RF button on front panel or select ON and Apply from application.

Modulation FEC*

The default FEC is 2/3, however improved range operation can be achieved by selecting FEC 1/3. FEC 1/3 will improve signal range by 3dB. However FEC 1/3 reduces link capacity to 1.2Mb/s. *FEC 2/3 is recommended.*

Modulation Guard Interval

The Guard Interval is fixed at 1/16 in current firmware releases.

Modulation Bandwidth

For the Palladium transmitter products, the modulation bandwidth is fixed at 2.5MHz in current firmware release.

COFDM Mode

The COFDM mode can be changed between QPSK and 16QAM. QPSK is the default mode and will give the strongest most rugged RF link performance. Selecting 16QAM reduces the link performance by 5dB but doubles the link data throughput.