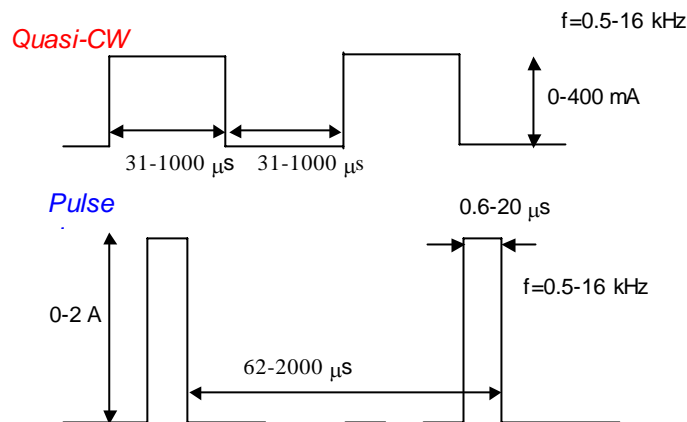


LED Driver Model D-31

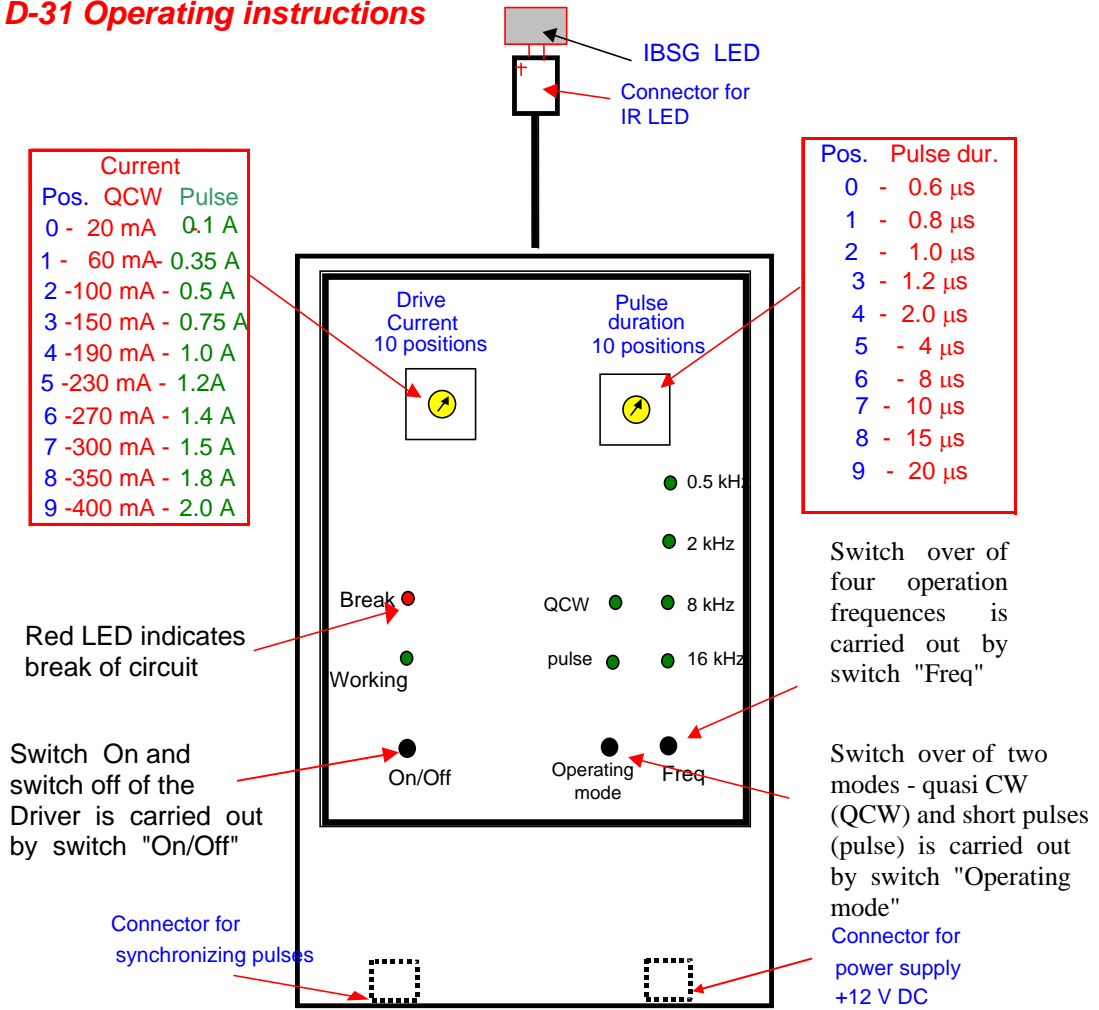
- Driver **D-31** is designed for power supply of all models Mid-IR LED's (1600-4600nm). Driver provides two modes of operation:
 - Quasi Continuous Wave (quasi steady-state) mode. Such mode provides maximum average optical power from the LED. Current in this mode can be changed in the range 0-400 mA. One of four frequencies (0.5 kHz, 2 kHz, 8 kHz and 16 kHz) can be selected.
 - Pulse mode. Such mode provides maximum peak optical power from the LED. In this mode besides changing of frequency, pulse duration can be also selected in the range 0.6-20 μs . Peak current in pulse mode can be changed in the range 0-2 A. Please, don't use combination of frequency and pulse duration that gives duty cycle >10%. We recommend using of 2 A pulse current only at pulse duration <1 μs .



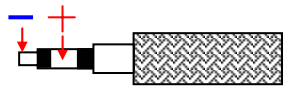
Parameters	Pulse mode	Quasi-CW mode
Pulse duration	0.6-20 μs	31-1000 μs
Repetition rate	0.5-16 kHz	0.5-16 kHz
Current amplitude	0.1-2 A	20-400 mA
Dimensions, mm	105x58x20	
Weight	90 g	
Power requirement	stabilize +12 V \pm 5%	

LED Driver Model D-31

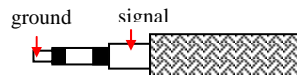
LED Driver D-31 Operating instructions



- Caution!** Set position "2" (100 mA) on Switch "Current".
- Insert AC/DC adapter into connector "+12V DC" (Attention on voltage polarity).



- If necessary connect "Connector for synchronizing pulses" with selective amplifier of the detector signal (Attention on voltage polarity).



- Insert IBSG LED into connector "LED" (Attention on voltage polarity - + to the red point on the LED package).
- Select operating mode - "QCW" or "Pulse" (switch "Operating mode"). Green LED will indicate selected mode
- Select frequency - "0.5 kHz, 2 kHz, 8 kHz or 16 kHz" (switch "Freq"). Green LED will indicate selected mode
- If you are going to work in pulse mode, select pulse duration - (one of 10 positions on switch "Pulse duration").
- Set position "0" on Switch "Current"
- Switch On Driver (switch On/Off). Green LED "Working" will indicate that current is flowing. If after switching on current is not flowing red LED "Break" will indicate break of the circuit. That situation can take place if testing Infrared LED is damaged.
- Select drive current that you need beginning switching from "0". Please, be sure that drive current don't expire maximum value for the tested infrared LED pointed in Technical Specification of the LED.