



ELFORLIGHT

REMOTE CONTROL OPTION FOR HPG & FQ SERIES



Elforlight Ltd
4B Brunel Close
Drayton Fields
Daventry
Northants
NN11 8RB
UK

Tel +44 1327 300069: Fax +44 1327 300076

www.elforlight.com

Elforlight Remote Control Pendant

The Remote Control Pendant is attached to the laser via a 25 way D type socket on the rear of the power supply unit. It is automatically sensed on power up.

The pendant should not be “HOT” plugged whilst the laser power supply is energised.

If the pendant is removed during operation, the laser system will shut down safely.

If the control knob is not in the OFF position on power up, the laser will do nothing and the bleeper will sound until the knob is turned to the OFF position. This is to prevent automatic start up sequencing in the event of power being applied and the knob being in any position other than OFF.

The user may advance the knob one step at a time.

The ready LED will go off whilst the laser is busy, and will turn on again when the laser is ready for the next knob position. There will also be a bleep to indicate the new knob position has been detected.

The user may also advance the knob by more than one step, and the laser system will automatically sequence. Thus it is possible to turn the knob from the OFF to the OPEN position in one movement to achieve automatic emission.

The ‘Demand 0-100%’ control enables adjustment of laser current.

LEDs

Function	Colour	Size
Power	Blue	5mm
Emission	Yellow	5mm
Interlock	Red	5mm
Fault	Orange	5mm
Aux	Yellow	5mm
Ready	Green	3mm
Temp Lock	Yellow	3mm
Shutter Open	Red	3mm
Shutter Closed	Green	3mm

The Power LED is on when the pendant is attached to the laser controller and

The Emission LED is on when diode current is flowing

The Interlock LED is on when the interlock plug is removed

The Fault LED is on when a fault condition has been detected

The Aux LED is on when the laser is in Auxiliary Mode

The Ready LED is on when the laser has finished executing the previous command and is ready for the next command

The Temp Lock LED is on when all the temperature controlled elements of the laser system are at their temperature setpoints

The SHUTTER OPEN LED is on when the system detects that the shutter is open

The SHUTTER CLOSED LED is on when the system detects that the shutter is closed

Control Knob Positions

OFF (Fully anticlockwise, 12 O'clock position)

The power supplies for the TEC's and RF Q-Switch driver are off.

Main heatsink fans are off.

Temperatures may drift out of lock.

Laser diode is off.

Shutter is closed.

Shutter Closed LED is on.

STANDBY (1 O'clock position)

The power supplies for the TEC's and RF Q-Switch driver are on.

Main heatsink fans are on.

Temperature lock should be achieved after a short delay.

Laser diode is off.

Shutter is closed.

Shutter Closed LED is on.

IDLE (2 O'clock position)

The power supplies for the TEC's and RF Q-Switch driver are on.

Main heatsink fans are on.

Temperature lock should be achieved after a short delay.

Ready LED goes off.

Diode current is ramped up to 20% of Ilimit.

Ready LED is on.

Emission LED is on.

Shutter is closed.

Shutter Closed LED is on.

POWER (3 O'clock position)

The power supplies for the TEC's and RF Q-Switch driver are on.

Main heatsink fans are on.

Temperature lock should be achieved after a short delay.

Ready LED goes off.

Diode current is ramped up to Vernier dial setting as a % of Ilimit.

Ready LED is on.

Emission LED is on.

Shutter is closed.

Shutter Closed LED is on.

OPEN (4 O'clock position)

The power supplies for the TEC's and RF Q-Switch driver are on.

Main heatsink fans are on.

Temperature lock should be achieved.

Ready LED goes off.

Diode current is set to Vernier dial setting as a % of Ilimit.

Ready LED is on.

Emission LED is on.

Shutter is opened.

Shutter Open LED is on.

AUX (Fully clockwise, 5 O'clock position unmarked position).
The power supplies for the TEC's and RF Q-Switch driver are on.
Main heatsink fans are on.
Temperature lock should be achieved.
Aux LED is on.
Ready LED goes off.
Diode current is locked, Vernier dial ignored.
Ready LED is on.
Emission LED is on.
Shutter is open.
Shutter Open LED is on.

Dimensions

The basic pendant box is 140mm x 65mm x 28mm.

The length to include the cable gland is 160mm.

The height to include adjustment knobs is 52mm.