

1000 Plus Series Safety Light Curtains - Quick Start Guide

1 Power Supply Requirements

Use a fully regulated power supply, 24v DC plus or minus 20%. The power supply must be capable of delivering 1.5A continuous. Reference Box J on the 1000 Plus Series installation sheet.

2 Light Curtain Electrical Connections

Transmitter (Tx)

2 wires, brown to +24v and blue to 0v.

Receiver (Rx)

4 wires, brown to +24v and blue to 0v.

The white and black wires are the safe outputs.

Output status is 24v when the guard is active and 0v when the guard is interrupted.

Reference Box J on 1000 Plus Series installation sheet.

3 Switching on the safety light curtain

The light curtain is switched on by supplying voltage to the transmitter and receiver units. Please see point 5 below for explanation of the diagnostic indicators.

4 Range

Check that the light curtain range specification meets the application requirements.

30mm ODC 0.5m to 5m 40mm ODC 4m to 10m Perimeter 0.5m to 5m and 4m to 10m

5 Diagnostics

Transmitter (Tx)

When the unit has 24v DC applied to it a yellow 'blinking' LED indicator shows that the unit is working.

Receiver (Rx)

When the unit has 24v DC applied, with the transmitter (Tx) and receiver (Rx) units out of alignment, the receiver (Rx) head will display a red LED indicator. Yellow 'steady' indicators on the (Rx) receiver column will also indicate that the light curtain is incorrectly aligned or the light curtain detection zone is 'blocked'.

When the transmitter (Tx) and receiver (Rx) are aligned a yellow 'blinking' LED indicator will be displayed. The red LED indicator goes out and a green LED indicator comes on showing the light curtain is active. The unit is now operational, if you interrupt the light curtain then the green LED indicator goes out and the red LED indicator comes on.

If at any time the red LED indicator starts 'blinking' then the unit has gone into a lockout condition and will need interruption of the power supply to reset the unit. If cycling the power does not rectify the problem then the unit is faulty and will need to be returned to Smartsan Ltd for repair.

Reference Box B & G on the 1000 Plus Series installation sheet.

6 Interference

Infra - red (IR) directed into the receiver (Rx) head may cause the unit to trip.

Sun light is a common cause of tripping and needs to be considered at the time of installation.

Reference Box E, picture 2 on the 1000 Plus Series installation sheet.

7 Reflections

Care must be taken when mounting the transmitter (Tx) and receiver (Rx) units close to reflective surfaces.

Reference Box E, picture 1 on the 1000 Plus Series installation sheet.

8 Safety Distances

Please contact your local Distributor or Smartsan Ltd to check that the safety light curtain meets the requirements of your particular machine safety application.