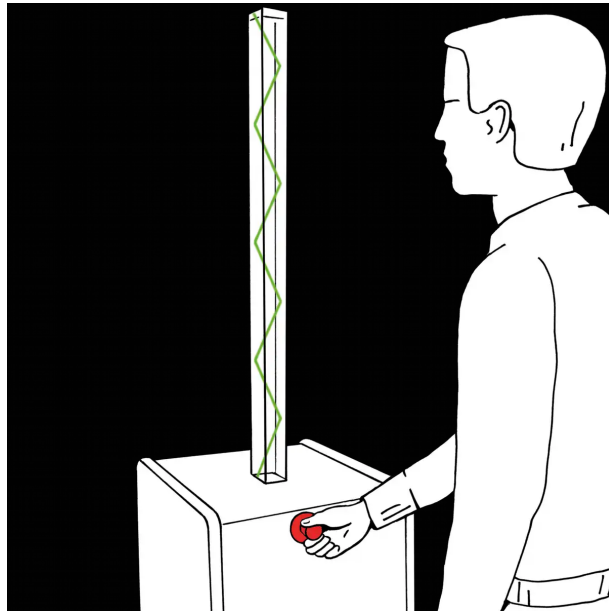


Total Internal Reflection

How can a ray of light be formed in a zigzag shape?



Turn the knob and watch what happens.

All of the light is reflected back from the sides of the plexiglass rod, as if from a mirror. None of the light passes through the sidewalls of the rod. This is called total internal reflection. When the laser beam hits the side at an angle below 48° , it bends away from the side at the same angle that it had when it hit the wall. This is called the law of reflection.

Optical waveguides enable us to guide high power light in a safe way and to transmit high amounts of data over long distances.