automatc railway gate open and closing system

Abstract

The Automatic Railway Gate Open and Closing System project aims to design and develop a system that automatically opens and closes railway gates at unmanned crossings using infrared sensors to detect approaching trains. The system consists of infrared transmitters and receivers placed on either side of the crossing, which send a signal to a PIC controller to close the gate when a train is detected. Once the train has passed through the crossing, the gate re-opens. This system aims to prevent accidents at unmanned crossings by automatically operating the gate based on train movement.

Block diagram:

