

Operational Description

The remote transmitter is a device that allows a user to remotely turn low-voltage devices on and off by means of an inline controller switch (the receiver). The user depresses one of the four button switches on the face of the hand-held remote transmitter depending on the zone they wish to operate. When the user depresses a button the remote is powered and the Linx transmitter IC transmits the output from the Holtek encoder IC. When the user releases the button, the transmitter is de-powered and ceases RF emissions.

The user can turn the inline controller switch (receiver box) on by holding the switch and releasing within approximately two seconds; depressing the switch for more than two seconds turns the inline controller switch off. The transition from turning the inline controller switch (receiver) on to off is done within the transmitter using a timer IC to switch the state of one of the Holtek encoder pins.

The intended uses of this wireless inline controller system include indoor/outdoor low-voltage lighting (6VAC – 15VAC), sprinkler systems (28VAC), and automotive applications (12VDC). Other low-voltage applications such as alarm systems can also be controlled with this system. The inline controller switch (receiver) can be installed in any low-voltage application with an operating voltage (both AC and DC) within 5 to 35 volts. The receivers IC, as well as other components within the inline controller switch only operates from a constant 5-volt DC power supply (voltage variations are isolated from the electronics). The hand-held transmitter only operates using a single 3-volt battery.

The transmitter antenna consists of a printed circuit board trace and can't be removed or replaced.

Brian Smyth
Owner, Engineering Industries