

## SpeedGate Remote Control



- Gate Open/Close Remote Control System
- 12 or 24Vdc Power Supply
- AM Remote Receiver Decoder
- High Security Protocol
- 'Easy Learn' Tx Encoder Feature
- Easy Installation via Screw Terminals
- Up to 50 Transmitters per System
- 315 MHz
- 1 Relay Output 12Apk @ 230Vac
- 2 Relay Outputs 2A @ 12Vdc
- Momentary or Latching Outputs
- IP65 Rated Enclosure (Wall Mounting Lugs Supplied)
- Requires No Radio License
- 315MHz FCC Compliant
- Range: up to 150 ft.

(Range stated is optimum, direct line of sight. In worst conditions this can be reduced by over 50%)

## Description

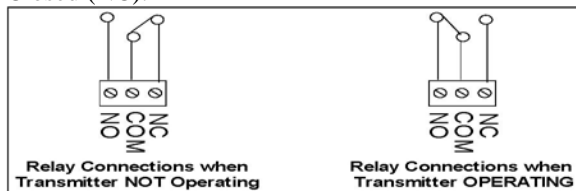
A 'ready to operate' remote control systems using AM, which contains a transmitter and receiver decoder pair. Installation simply requires connections to power supply and the output relay screw terminals. The output relays are activated by the key press on the transmitter encoder.

The system utilizes the Microchip based protocol, ensuring high security and reliability.

The decoder has the capacity to learn up to 50 unique transmitters. These are memorized even if the power is removed. The decoder is supplied in an IP65 rated enclosure with cable gland and wall mounting lugs supplied.

## Data Outputs

Each output relay provides an isolated switch. Connections are Common (COM), Normally Open (NO) and Normally Closed (NC).



The jumper links (J1, J2) configure the outputs to be momentary or latching.

The jumper links are made / removed by a small link 'cap' placed over the pin header.

Link 1 (LK1)	Link 2 (LK2)	O/P 1	O/P2	O/P3
Open	Open	Latch	Latch	Latch
Open	Connected	Mom	Mom	Mom
Connected	Open	Mom	Mom	Latch
Connected	Connected	Latch	Latch	Mom

## Programming

In order to start programming the unit, you will need access to a switch that is located inside the unit. Remove the 4 screws in all corners and open the lid in order to reach the 'learn switch'.

### Combining Transmitters to receivers

Each transmitter has a unique identity, (one of 16 billion possible numbers); the identity number is encrypted and transmitted as a random number that changes on each press of the switch (The same number is never repeated!). Each receiver can learn the identity of up to 50 unique transmitters.

Note: the same transmitter may be taught to any number of receivers to create 'master keys'.

### Learning a New Transmitter Key Fob Switch

Press the 'learn' switch (SW1), the accept LED will illuminate.

Press the transmitter once, accept LED will extinguish.

Press the transmitter again, the accept LED will flash.

Wait for the accept LED to stop flashing.

This transmitter will now operate the system. The system can learn up to 50 unique transmitter key fobs.

### Erasing Existing Transmitters

To completely erase the Tx encoders, press SW1 on the Rx decoder for 10 seconds.

The learn LED will turn off after the 10 seconds to indicate the Tx encoder(s) have been erased

**NOTE:** You can not erase individual Tx encoders

## Technical Specifications

### *Transmitter Key Fob*

Battery Type GP23AE (supplied)

<b>Electrical Characteristics</b>	<b>Min</b>	<b>Typical</b>	<b>Max</b>	<b>Units</b>
Supply Voltage	8.5	9	16	V
Supply Current : Quiescent		0		mA
Supply Current : Transmitting		8		mA
Operating frequency		433.92		MHz

### *Receiver Decoder*

Dimensions (not including antenna) 4.4" x 3.4" x 1.4" (110mm x 85mm x 35mm)

Storage Temperature: -4°F ~ 158°F (-10°C ~ +70°C).

Operating Temperature: 32°F ~ 131°F (0°C ~ +55°C).

<b>ELECTRICAL CHARACTERISTICS</b>	<b>Min</b>	<b>Typical</b>	<b>Max</b>	<b>Units</b>
Supply Voltage for +12 v	10	12.0	16	V
Supply Voltage for +24 v	22	24.0	28	V
Supply Current : Quiescent all relays operating		19 100		mA
Time delay from Tx on Switch to Rx Relay operation			100	ms
Time delay from Tx sw relax to Rx Relay release			300	ms