

# **GLR43301**

Single Channel 433MHz Gigalink™ Receiver with Timer Controlled Relay Output

#### Features

- Supply voltage can be 12 24 Volts AC or DC
- Highly sensitive receiver input stage. Operating range of 350 metres (980 ft) is possible
- One relay output. Can switch loads up to 8 Amps
- Crystal controlled for high stability and performance
- Momentary, latching, timed and security latching output modes can be selected by the user
- Power ON LED indicator



- Automatic gates.
- Security systems.
- Timer controlled outputs.
- Simple on/off functions.



The GIGALINK<sup>TM</sup>, GLR43301 is the **most advanced Remote Control technology** available in the world today. GIGALINK<sup>TM</sup> is an invention that has revolutionised the entire Remote Control.

The GLR43301 state-of-the-art invention brings a new dimension in the world of Remote Control technology in domestic, **commercial and industrial** applications.

The innovative microcontroller technology replaces the traditional dip switch coding which **eliminates** any possible **code grabbing.** Special features such as over four billion code combinations and ability to program any number of transmitters to a receiver adds up to the most advanced and secure Remote Control available.

The receiver has a relay output that is activated when the GLR43301 receives the correct code from the GIGALINK<sup>TM</sup> transmitter. The relay out has voltage free contacts. Contacts available are "C" Common, "NC" Normally Closed and "NO" Normally Open.

# **Unique Code System**

The microcontroller EEPROM allows large volume users to have a unique code. This enables Elsema to offer OEM manufacturers "their own" radio control.





Changing the Four-Way Dip Switch
The GLR43301 has a 4-way dip switch which allows the user to select between several different output modes. This is shown below:

DIP Switch Mode Settings  The output relay will respond in the following manner when receiving the correct signal from a transmitter		
1 2 3 4 ON OFF	"Momentary": Relay on, only while correct signal is received	
	"Latching": Relay alternates at every correct incoming signal	
	"Delayed Off 1": Relay on, but delayed off for 1-10 seconds, adjustable by trimpot	
	"Delayed Off 2": Relay on, but delayed off for 10-300 seconds, adjustable by trimpot	
	"Pulsing": Relay will pulse at 1Hz for 10-300 seconds, adjustable by trimpot	
	"Security latching On": Relay will energize until supply to receiver is momentarily interrupted	
	"On-Off": This mode requires a 2-channel Tx. Channel 1 will always energize the relay Channel 2 will always de-energize the relay To use this mode you need to do channelised code programming. Do not use single code programming.	
	"On-Off": This mode requires a 4-channel Tx. Channel 3 will always energize the relay Channel 4 will always de-energize the relay To use this mode you need to do channelised code programming. Do not use single code programming.	
	"Test": Relay is energized, for test purpose only	



#### **Output Modes**

Relay output on the receiver by default the mode is set to momentary. Other modes are selectable from the 4-way dipswitch.

# **Factory Default = Momentary**

**Momentary -** Output is active for as long as the transmitter button is pressed.

This is a standard mode on most automatic gates or garage door openers.

**Latching** - Output remains active until next press of the transmitter button. *Similar to switching "on" and "off" a light.* 

**Security** - Output remains active until power to the receiver is removed. Similar to security alarms and fire alarms.

#### **Customised Software**

Custom output modes can be programmed to do special functions. Call Elsema for more details.

#### **Technical Data**

Supply Voltage	12 – 24 Volts AC or DC. (Recommended powerpack: 12PP-1000)
Current Consumption	16 mA on standby at 12 VDC supply 45 mA if relay "ON" at 12VDC supply
Receiving Frequency	433.920MHz
Operating Temperature Range	-5 to 50°C
Outputs	Change over relay output, rated at 8 Amps/240 Volts
Connections	6-way screw type terminal block
Antenna	Elsema's ANT433MHz series antennas or piece of approximately 690 mm long wire for short range applications.
Dimensions	95 X 70 X 30 mm (Enclosed Version 185 x 90 x 40 mm)
Mounting hole size	3.97 mm or 5/32"
Useable Transmitters	All Elsema Type 433MHz GLT series

### AC/DC Supply and Antenna

AC/DC power supply and antenna is connected to the terminal block marked + and -. The shield of the antenna coaxial cable should be connected to the minus ( - ) terminal block.

Do not connect the AC/DC supply to the 2.5-mm coding socket since connection may damage the microcontroller.

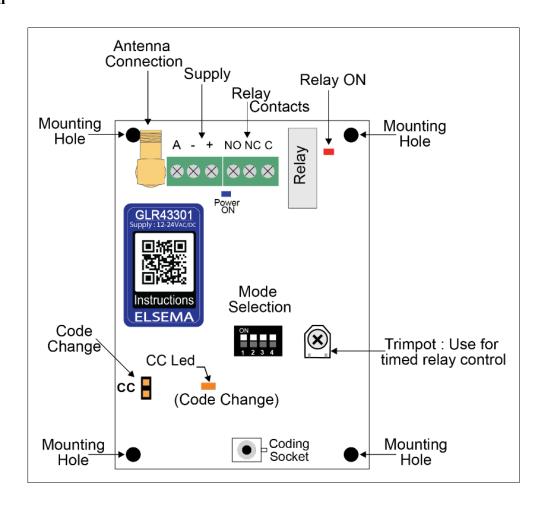


#### Case

The GLR43301 can be supplied without a case; this allows the receiver to be integrated according to your needs. The receiver with a case is known as a GLR43301E.

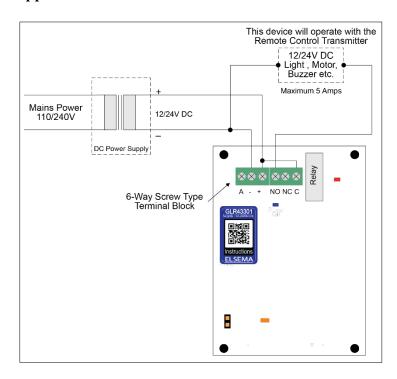


# **Block Diagram**

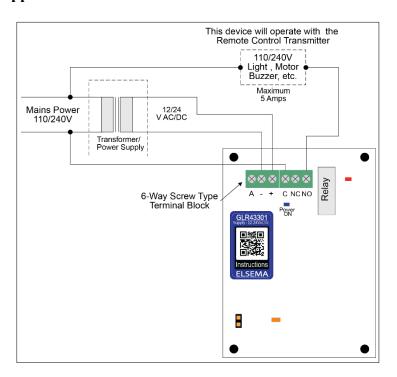




# GLR43301 12/24 VAC/DC Application



# GLR43301 240/110 VAC Application



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