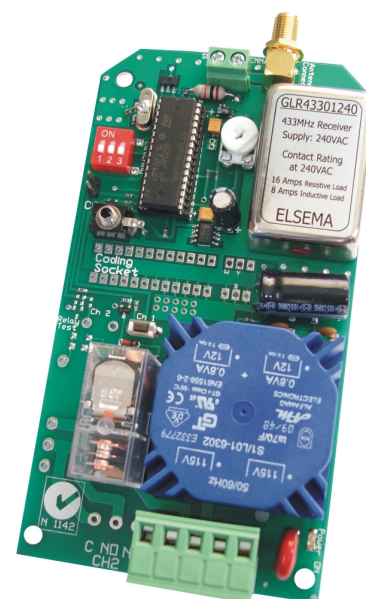


GLR43301240

1-Channel 433MHz Gigalink, Receiver with Mains AC Supply

Features

- Supply voltage 240VAC (also available in 110-120VAC supply for international markets)
- High efficiency toroidal transformer
- High capacity output relay
- Pluggable type terminal blocks for easy installation
- Test push buttons for the relay
- Momentary, Flip Flop, Latching and Off delay modes are all user selectable
- Optional QM150 bracket available for easy mounting to cases or walls
- Also available in an IP66 rated case for outdoor installations.



Applications

- Pump Control
- Long distance light control
- On/Off applications in agricultural devices
- Basic Telemetry eg. Water level indication
- Security alarm

Description

The GIGALINK™, GLR43301240 is the most advanced Remote Control technology available in the world today. GIGALINK™ is an invention that has revolutionised the entire Remote Control technology including Elsema's earlier version of FMT- ... and FMR- ... series. The GLR43301240 state-of-the-art invention brings a new dimension in the world of Remote Control technology in domestic, commercial and industrial applications.

The toroidal transformer on this receiver is 25-30% more efficient than the conventional types. It has a low operating temperature, low hum and low stray magnetic field.

Connecting wires to the receiver has been made easier by the pluggable type terminal block. An on board LED indicates when power is connected and an extra LED on the board to indicate when the relay is activated. There is a test button for the relay output to test your connections.

There are test buttons for each relay output and a high quality SMA RF connector is added to the antenna connection on the 433MHz for optimum performance.

The receiver's high capacity output relay is capable of switching up to 16 Amps of resistive load and up to 8 Amps of inductive load. A world first for a standalone receiver.

The receiver can be mounted to a Quick Mount or in a weatherproof case with an IP66 rating.

Four billion codes

The user can easily change the code on all the channels. Momentary joining the two CC pins on the receiver board sets all channels to one random code. One of 4,294,967,296 possibilities is selected.

The receiver has a relay output that is activated when the GLR43301240 receives the correct code from the GIGALINK™ transmitter. The relay out has voltage free contacts. Contacts available are "C" Common, "NC" Normally Closed and "NO" Normally Open.

Code Programming

In programming mode the receiver sends a random code to program the transmitter channel(s). This is known as reverse programming.

Momentary joining the two CC pins on the receiver board sets the channel to a random code.

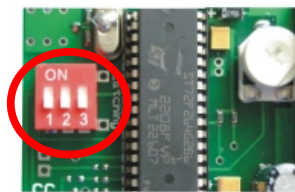
Follow the steps outlined in the receivers instruction sheet titled single code programming to complete the code programming.

The receiver power must be connected when code programming.

When programming is completed and the GIGALINK cable is removed from the receiver-coding socket, the 3-way dip switch is used to select different output modes. This is described below.

Different Modes for the Output

This 3-Way dip switch is situated beside the microcontroller. (Refer to the picture below)



3-Way DIP Switch Mode Settings

The output relay will respond in the following manner when receiving the correct signal from a transmitter

	<p>"Momentary": Relay on, only while correct signal is received</p>
	<p>"Flip-Flop": Relay alternates at every correct incoming signal</p>
	<p>"Delayed Off 1": Relay on, but delayed off for 1-10 seconds, adjustable by trimpot</p>
	<p>"Delayed Off 2": Relay on, but delayed off for 10-300 seconds, adjustable by trimpot</p>
	<p>"Latching On": Relay will energize until supply to receiver is momentarily interrupted</p>
	<p>"On-Off": This mode requires a 2-channel Tx. Channel 1 will always energize the relay Channel 2 will always de-energize the relay <i>To use this mode you need to do channelised code programming. Do not use single code programming.</i></p>
	<p>"On-Off": This mode requires a 4-channel Tx. Channel 3 will always energize the relay Channel 4 will always de-energize the relay <i>To use this mode you need to do channelised code programming. Do not use single code programming.</i></p>

240 AC Supply, Antenna and Relay Connections

AC power supply and relay connections are via the pluggable type terminal block. Antenna is via a two-way pluggable type terminal block. Do not connect the supply to the 2.5-mm coding socket since connection will damage the microcontroller.

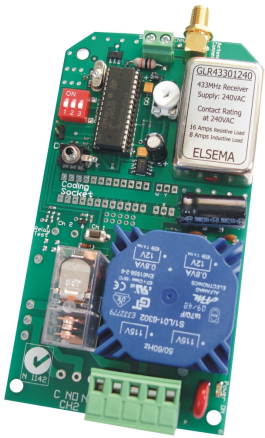


Applications

The receiver output can be set to different modes which allows it to be used in many diverse applications such as automatic gates, security, timer controlled outputs and simple on/off functions etc.


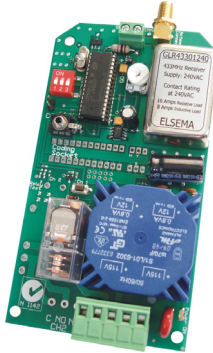

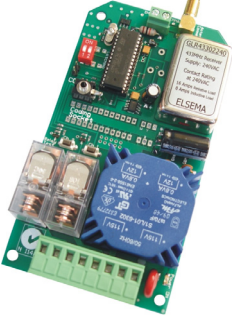
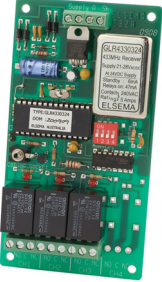





Unique Code System

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

Available with Options

		
<p>GLR43301240 1- Channel 240VAC Supply</p>	<p>GLR43301240Q 1- Channel 240VAC Supply in Quick Mount</p>	<p>GLR43301240E 1- Channel 240VAC Supply in an IP66 rated Case and with 1.7metre AC cord for plug and play</p>

Products in the Range

				
<p>GLR43301 1-Channel</p>	<p>GLR43301240 1-Channel, 240V</p>	<p>GLR43302 2-Channel</p>	<p>GLR43302240 2-Channel, 240V</p>	<p>GLR4330312, GLR4330324 3-Channel, 12 / 24V</p>
				
<p>GLR4330412 GLR4330424 4-Channel, 12 / 24V</p>	<p>GLR43308 8-Channel</p>	<p>GLR4330812 GLR4330824 8-Channel, 12 / 24V Relay Output</p>	<p>GLR43301SS GLR43302SS 1, 2 Channel, receiver with female connector</p>	<p>GLR43301SST GLR43302SST 1, 2 Channel with a 5-way terminal block.</p>

Technical Data

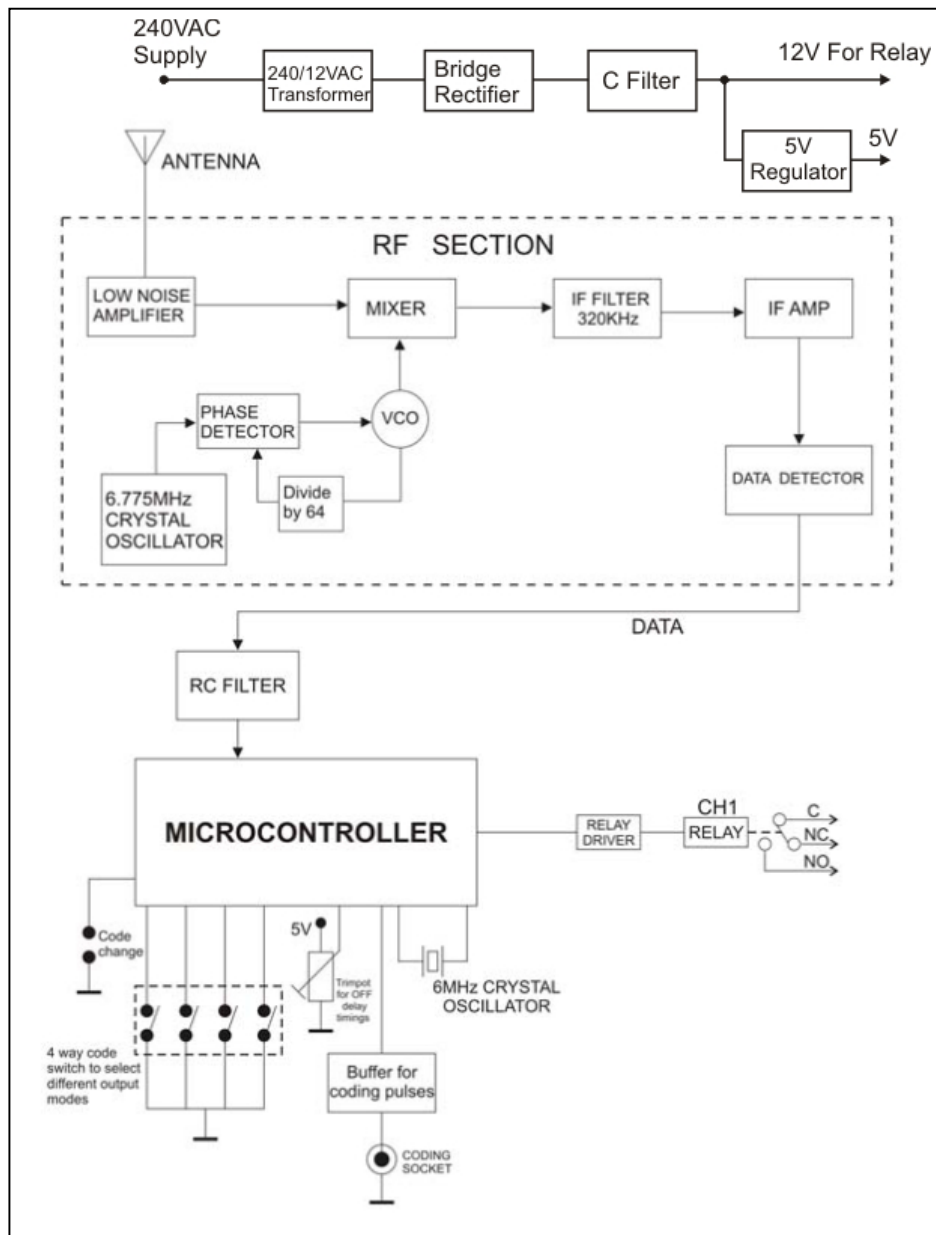
Supply Voltage	240Volts AC Mains (110-120VAC available on request)
Current Consumption	18mA, on 240V AC
Receiver Type	Single Conversion Superheterodyne
Receiving Freq	433.920MHz (Other frequencies available on request. Refer to the table below)
Type of Crystal	6.775MHz, Fundamental, 20pF, 30ppm
Operating Temperature Range	-5 to 50°C
IF Freq	320kHz
Selectivity	3dB at ±20kHz
Sensitivity	Better than 1.0uV (For output to switch on)
Type of Demodulation	Amplitude Shift Keying (ASK)
Decoding System	Microcontroller (32-bit word 4.29×10^9 codes)
Code Combinations	4,294,967,296
Outputs	Change over relay output, rated at 16 Amps of resistive load and up to 8 Amps of inductive load.
Connections	Supply, Antenna & Outputs - pluggable type terminal blocks
Antenna	Elsema's ANT433MHz series antennas or piece of approximately 690 mm long wire for short range applications.
Dimensions	130 x 70 x 37mm
Mounting hole size	3.97 mm or 5/32"
Weight	170g
Useable Transmitters	All Elsema Type 433MHz GLT-... series

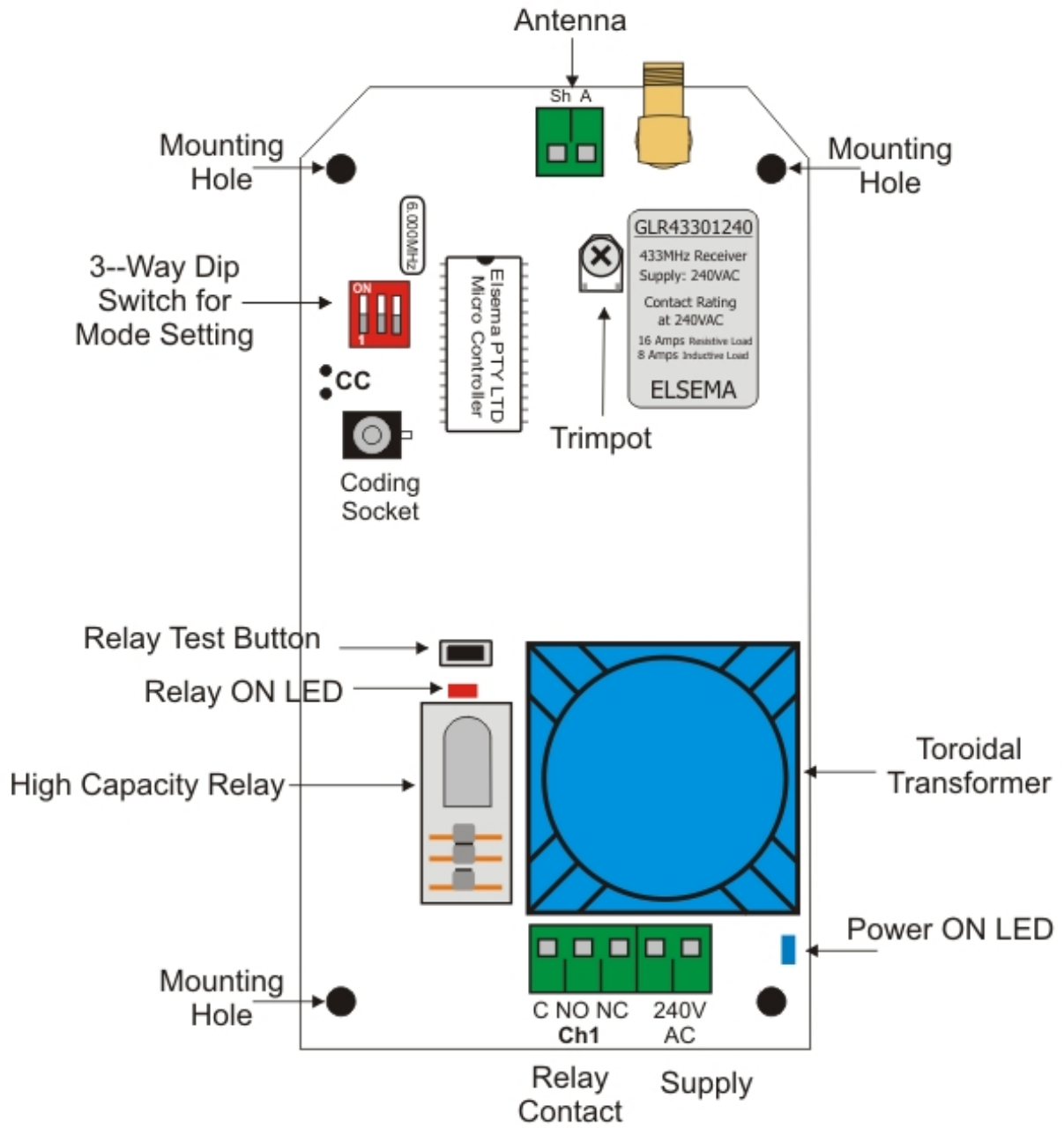
Available Frequencies

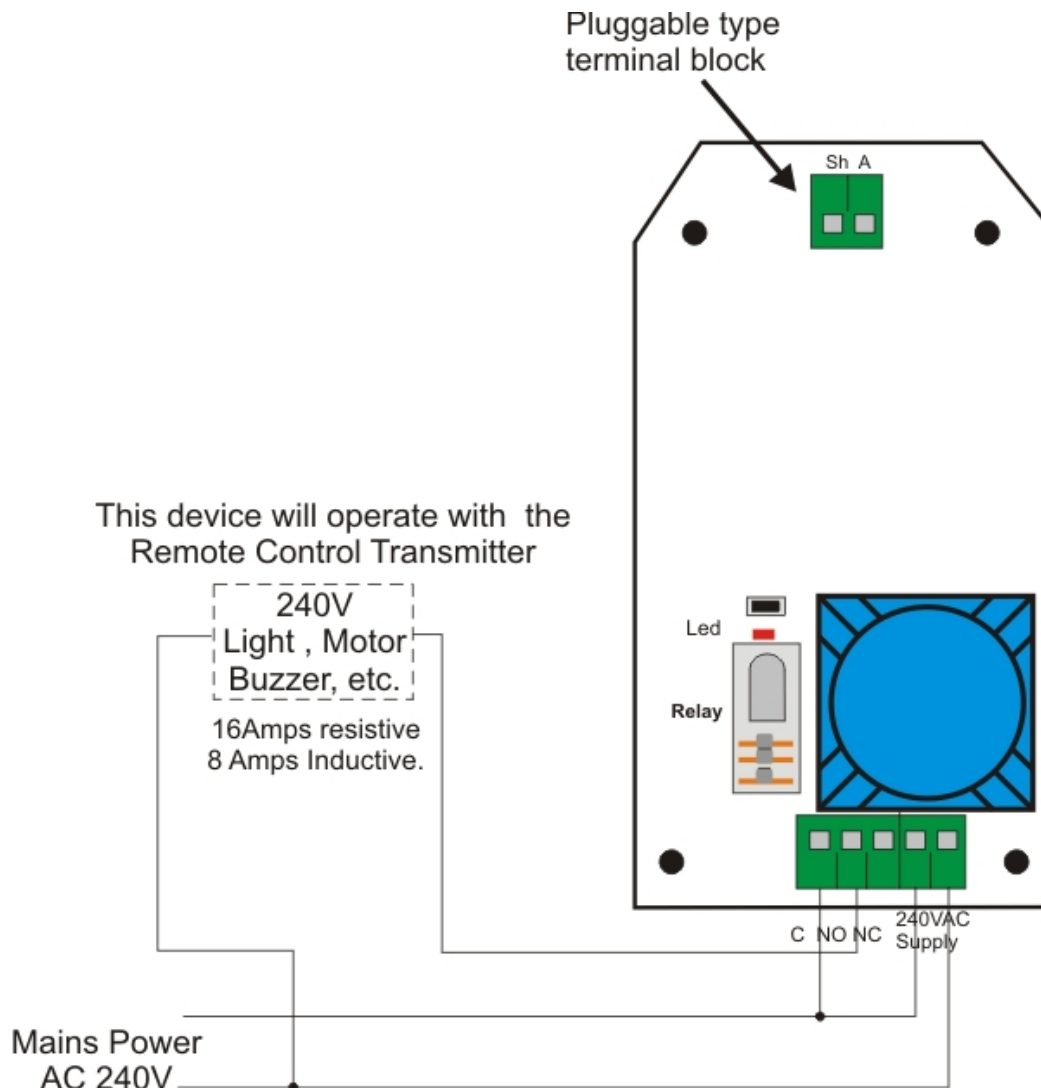
SF2	433.664 MHz
SF3	433.408 MHz
SF4	433.152 MHz
SF5	434.688MHz
SF6	434.432 MHz

Special Frequency products can be made upon request. There is a minimum quantity order of 10. Please quote Correct SF number when ordering transmitters on special frequencies.

Block Diagram





GLR43301240 Application**Manufactured by**

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NSW 2164
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Fax: 02 9725 2663
Website: <http://www.elsema.com>