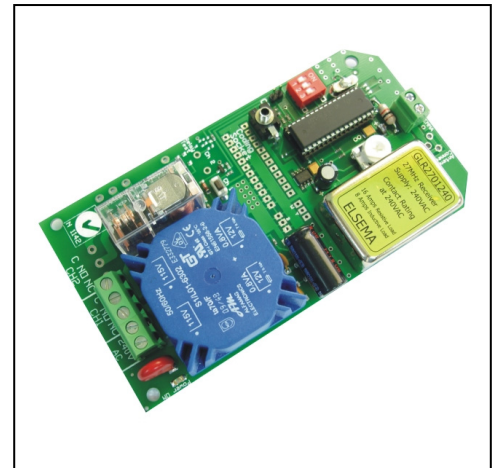


GLR2701240

1-Channel 27MHz Gigalink Receiver with Main 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™, GLR2701240 is an 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. This 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.

Connection to the receiver is via a five-way screw-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.

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.

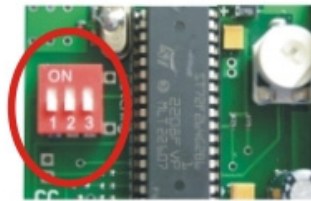
Follow the steps outlined in the receivers instruction sheet titled single code programming to complete the code programming.

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>

Technical Data

Supply Voltage	240Volts AC Mains (110-120VAC available on request).
Current Consumption	18mA 240V AC
Receiver Type	Dual Conversion Superheterodyne
Receiving Freq	27.195MHz (Other frequencies available: 27.045, 27.145 & 27.455MHz. NB. 27.455MHz is available for Europe Only)
Type of Crystal	10.245MHz, Fundamental, 20pf, 30ppm 16.495MHz, Fundamental, 20pf, 30ppm
Operating Temperature Range	-5 to 50°C
1 st IF Freq	10.7MHz
2 nd IF Freq	455kHz
Selectivity	-6dB at ±5kHz -20dB at ±6kHz
Sensitivity	1uV (for output to activate)
Image Rejection	At 26.285MHz better than -60dB
Type of Demodulation	Narrow-bandwidth Frequency Modulation (FM)
Occupied Bandwidth	±5kHz
Decoding System	Microcontroller (32-bit word 4.29×10^9 codes)
Code Combinations	4,294,967,296
Connection	5-way screw type terminal block for Supply and Relay 2-way screw type terminal block for Antenna
Output	Change over relay output, rated at 16 Amps of resistive load and up to 8 Amps of inductive load.
Antenna	50 ohms, 27MHz CB-Antenna or approximately 1m long & 1mm thick piece of wire
Dimensions	130 x 70 x 37mm
Mounting hole size	3.97mm or 5/32"
Weight	170g
Useable Transmitters	All Elsema Type 27MHz GLT-... series
Useable operating range	Up to 350m with proper 50 ohms, 27MHz CB-Antenna. Up to 200m with 1m long antenna wire. Antenna wire should be extended and away from metal. Ranges assume line-of-sight operation.

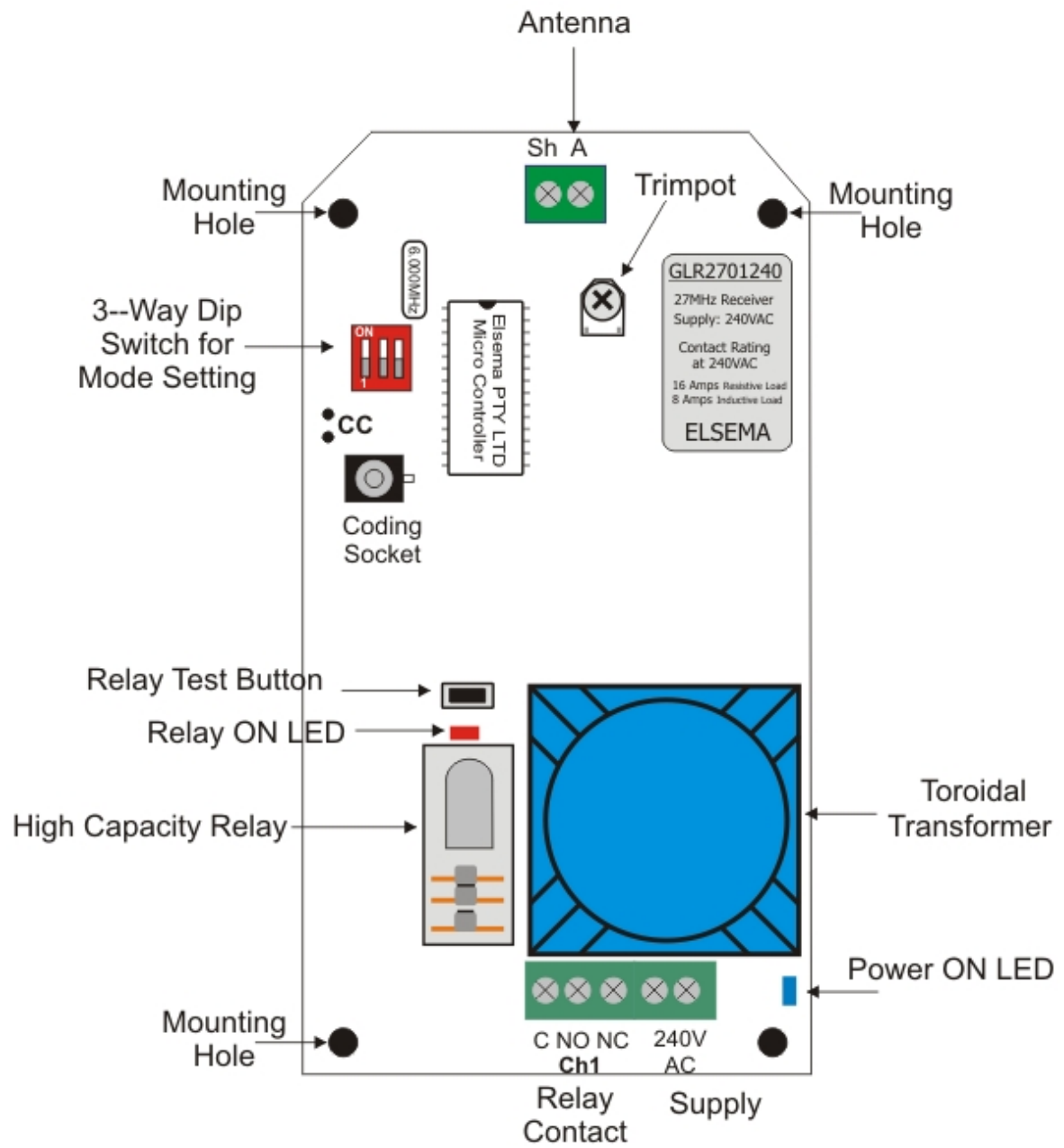
Available with Options

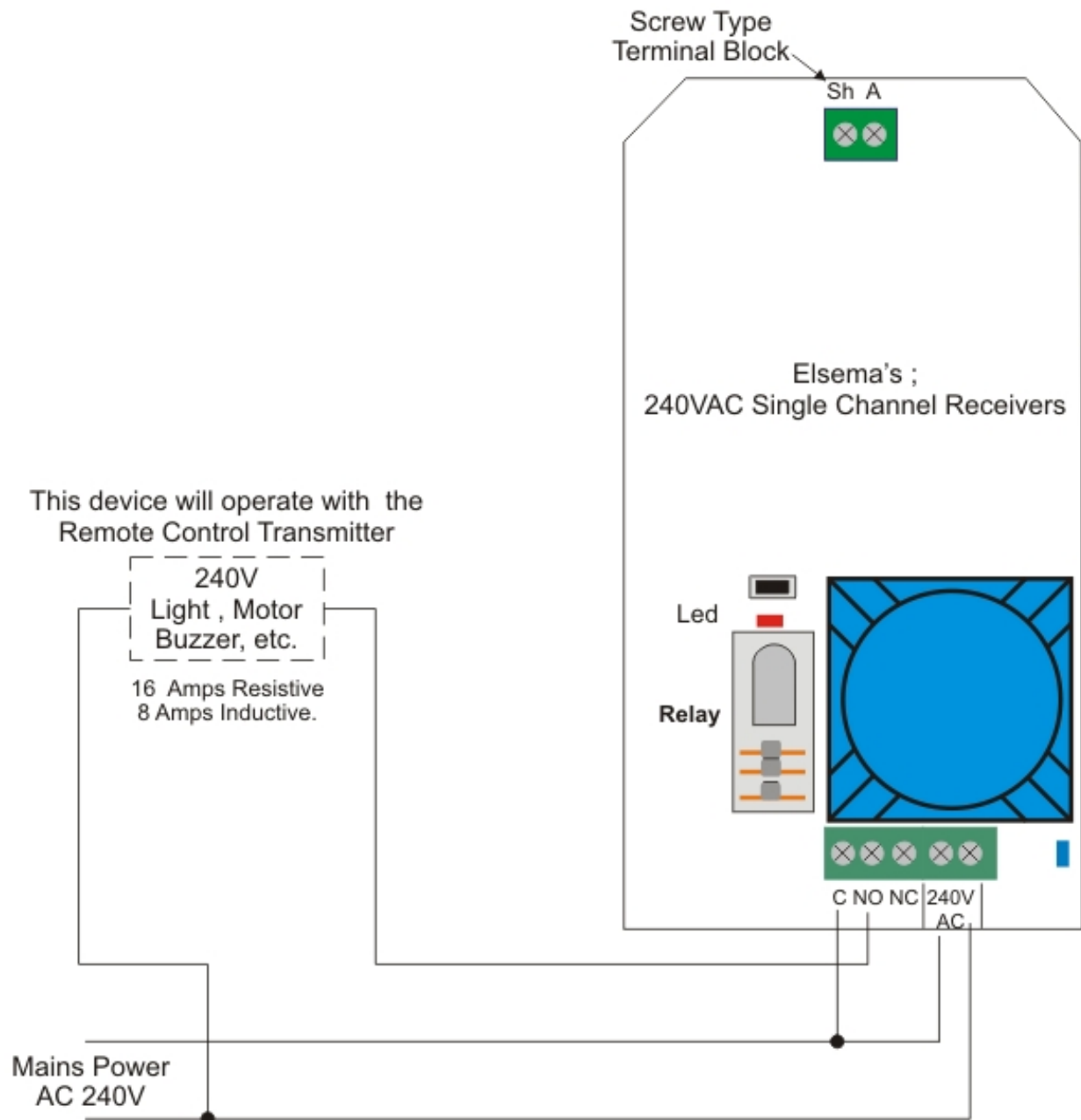
		
<p>GLR2701240 1- Channel 240VAC Supply</p>	<p>GLR2701240Q 1- Channel 240VAC Supply in Quick Mount</p>	<p>GLR2701240E 1- Channel 240VAC Supply in an IP66 rated Case and with 1.7metre AC cord for plug and play</p>

Products in the Range

				
<p>GLR2701 1-Channel</p>	<p>GLR2701240 1-Channel, 240V</p>	<p>GLR2702 2-Channel</p>	<p>GLR2702240 2-Channel, 240V</p>	<p>GLR270312 GLR270324 3-Channel, 12 / 24V</p>
				
<p>GLR270412 GLR270424 4-Channel, 12 / 24V</p>	<p>GLR2708 8-Channel</p>	<p>GLR270812 GLR270824 8-Channel, 12 / 24V Relay Output</p>	<p>GLR2701SS GLR2702SS 1,2 -Channel, Open Collector Output</p>	

Block Diagram



Application Diagram**GLR2701240****Elsema Pty Ltd**

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