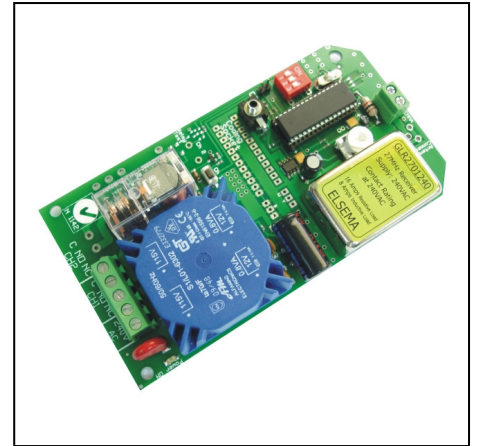


# GLR2701240

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, latching, Off delay and security latching output modes can be selected by the user.
- 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**

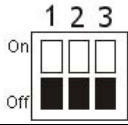
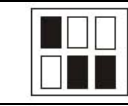
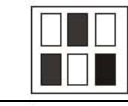
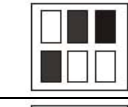
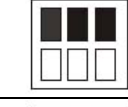
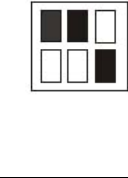
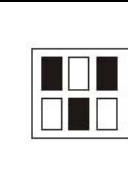
For code programming, please refer to the separate programming instructions.

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**

**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>"Latching": 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>"Security latching ": 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>

**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 Latching** - 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	240Volts AC Mains (110-120VAC available on request).
Current Consumption	18mA 240V AC
Receiving Frequency	27.195MHz
Operating Temperature Range	-5 to 50°C
Sensitivity	1uV (for output to activate)
Type of Demodulation	Narrow-bandwidth Frequency Modulation (FM)
Decoding System	Microcontroller (32-bit word $4.29 \times 10^9$ 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.

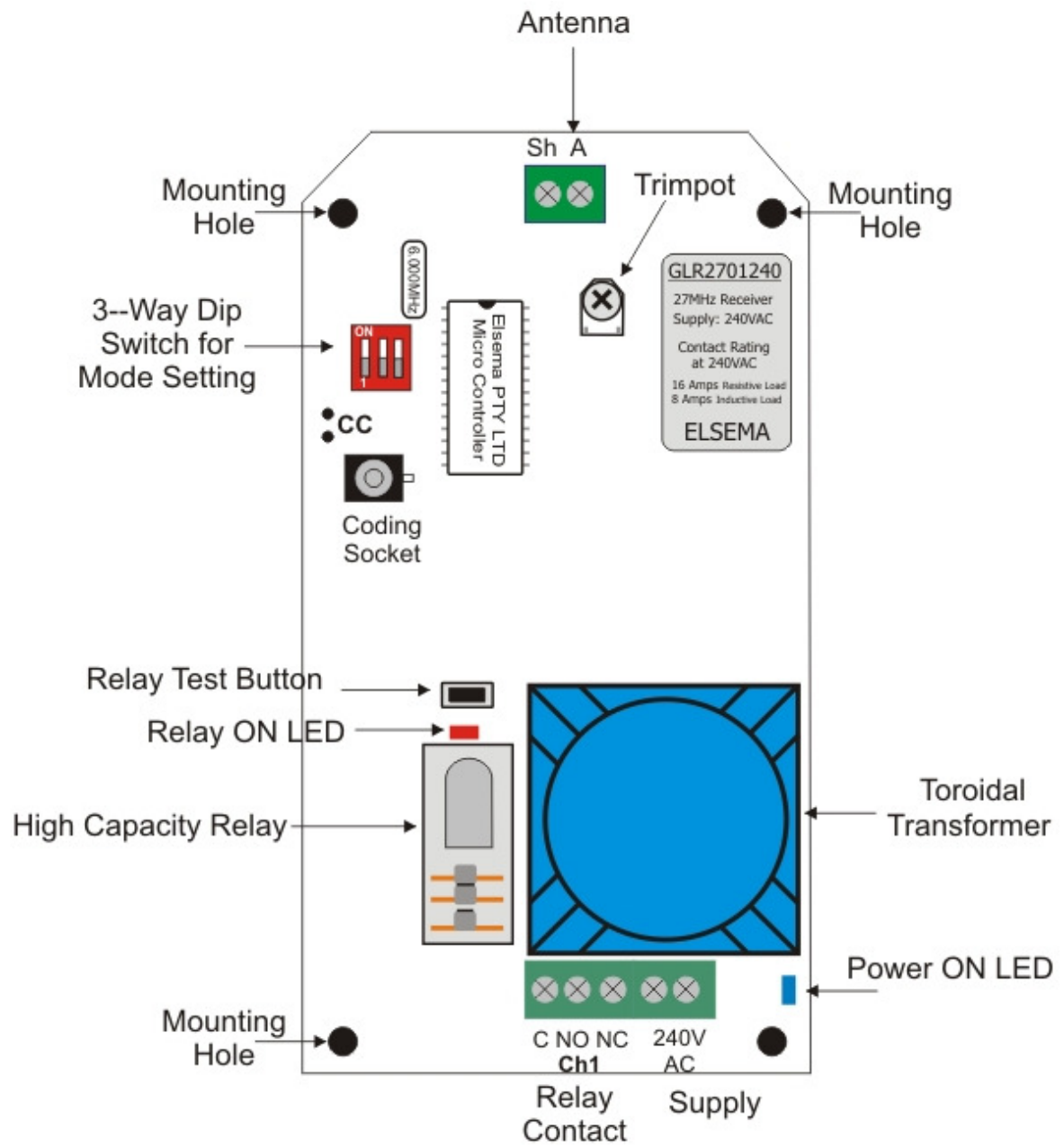
**Available with Options**

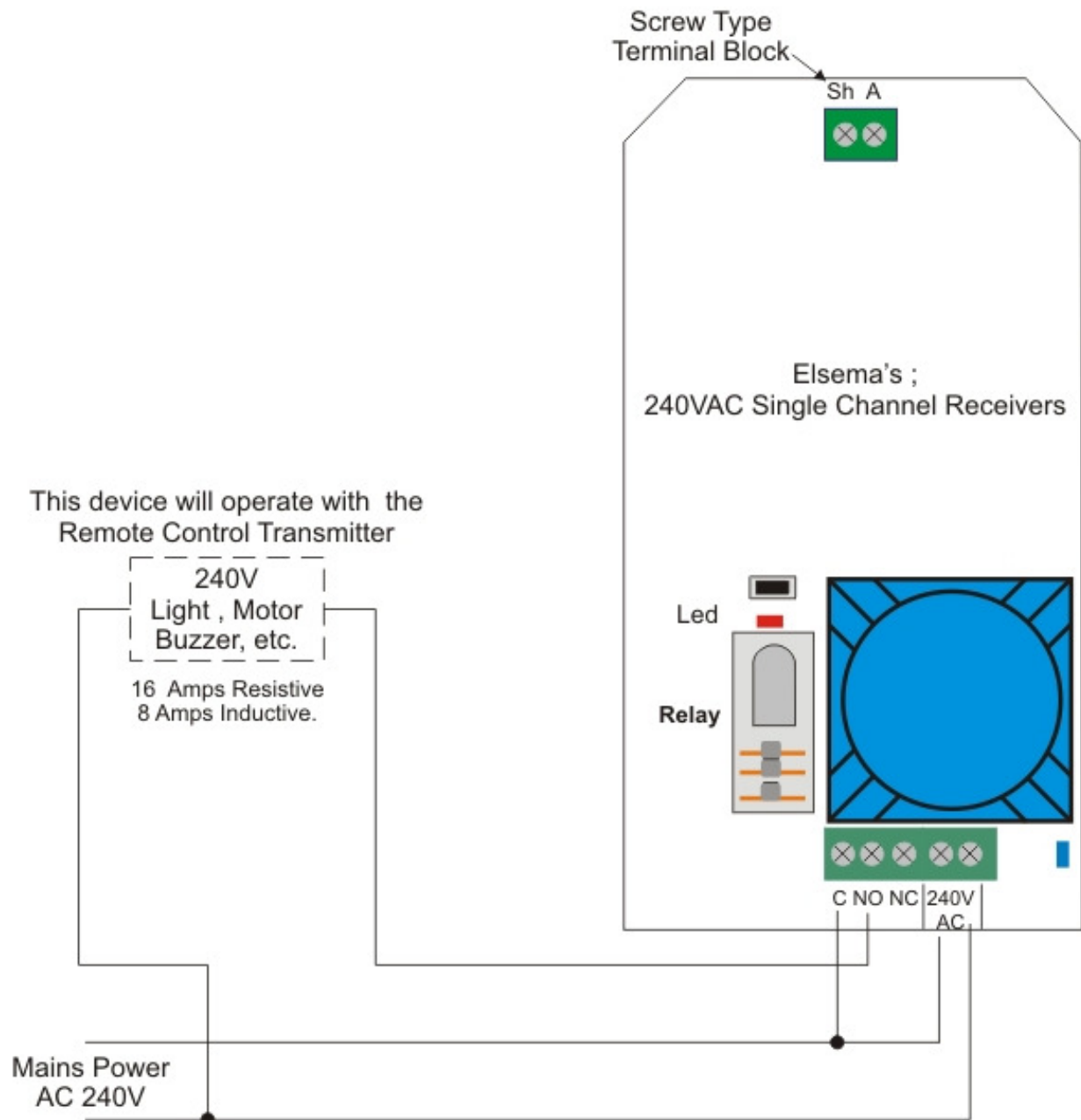
		
<p><b>GLR2701240</b> 1- Channel 240VAC Supply</p>	<p><b>GLR2701240Q</b> 1- Channel 240VAC Supply in Quick Mount</p>	<p><b>GLR2701240E</b> 1- Channel 240VAC Supply in an IP66 rated Case and with 1.7metre AC cord for plug and play</p>

**Products in the Range**

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

**Block Diagram**



**Application Diagram****GLR2701240**

## REGULATORY COMPLIANCE STATEMENTS

### American Users

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

### FCC Notice

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the computer and receiver.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

### Canadian Users

This Class [B] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe [B] respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

### Australian and New Zealand Users

This device has been tested and found to comply with the limits for a Class [B] digital device, pursuant to the Australian/New Zealand Electromagnetic compatibility (EMC) standard AS/NZS 61000.6.3 set out by the Spectrum Management Agency.