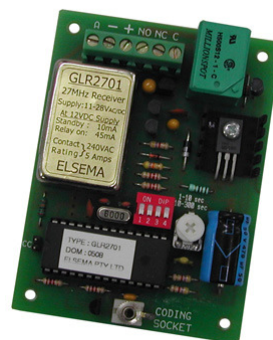


GLR2701

Single Channel 27MHz Gigalink™ Receiver with Timer Controlled Relay Output

Features

- Wide supply connection – 11.0 to 28.0 Volts AC/DC
- Highly sensitive receiver input stage. When used with GLT27.... series transmitters and antenna, an operating range of 350 metres (980 ft) is possible.
- Relay Output.
- Crystal controlled for high stability and performance.
- Dual Conversion to reduce interference.
- Uses micro-controller technology that can be re-programmed to suit unique applications
- Momentary, latching and security latching output modes is user selectable.
- Power ON LED indicator.



Applications

- Automatic gates, security, timer controlled outputs and simple on/off functions etc.



GLR2701E
Single Channel Enclosed

Description

The GIGALINK™, GLR2701 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 innovative microcontroller technology replaces the traditional dip switch coding which eliminates any possible code grabbing. Special features such as over four billion code combinations, operational over a wide voltage range, eight user selectable modes 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 GLR2701 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.

Output Modes

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

DIP Switch Mode Settings The output relay will respond in the following manner when receiving the correct signal from a transmitter	
	"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 <i>To use this mode you need to do channelised code programming. Do not use single code programming.</i>
	"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>(Mode added November 2006)</i> <i>To use this mode you need to do channelised code programming. Do not use single code programming.</i>
	"Test": Relay is energized, for test purpose only

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 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.

AC/DC Supply, Antenna and Relay Connections

AC/DC power supply, antenna and relay connections are via a six-way screw-type terminal block. Do not connect the supply to the 2.5-mm coding socket since connection may damage the microcontroller.

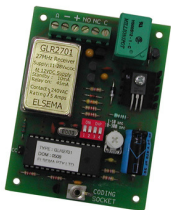
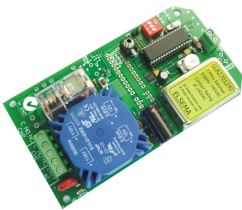

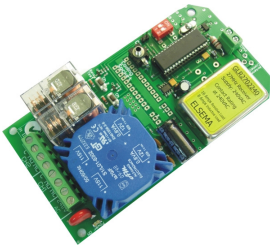
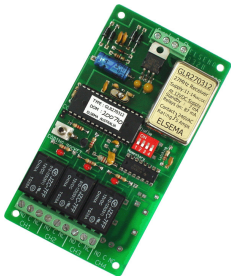
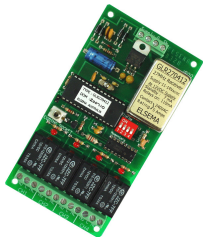

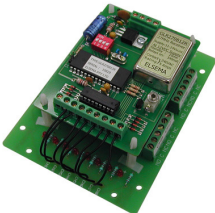
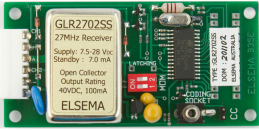

Unique Code System

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

Case

The GLR2701 can be supplied with or without a case. The case used to enclose the receiver is Elsema's black UBB plastic case. The receiver can also be inserted to a Quick Mount enabling easy mounting to walls roof etc

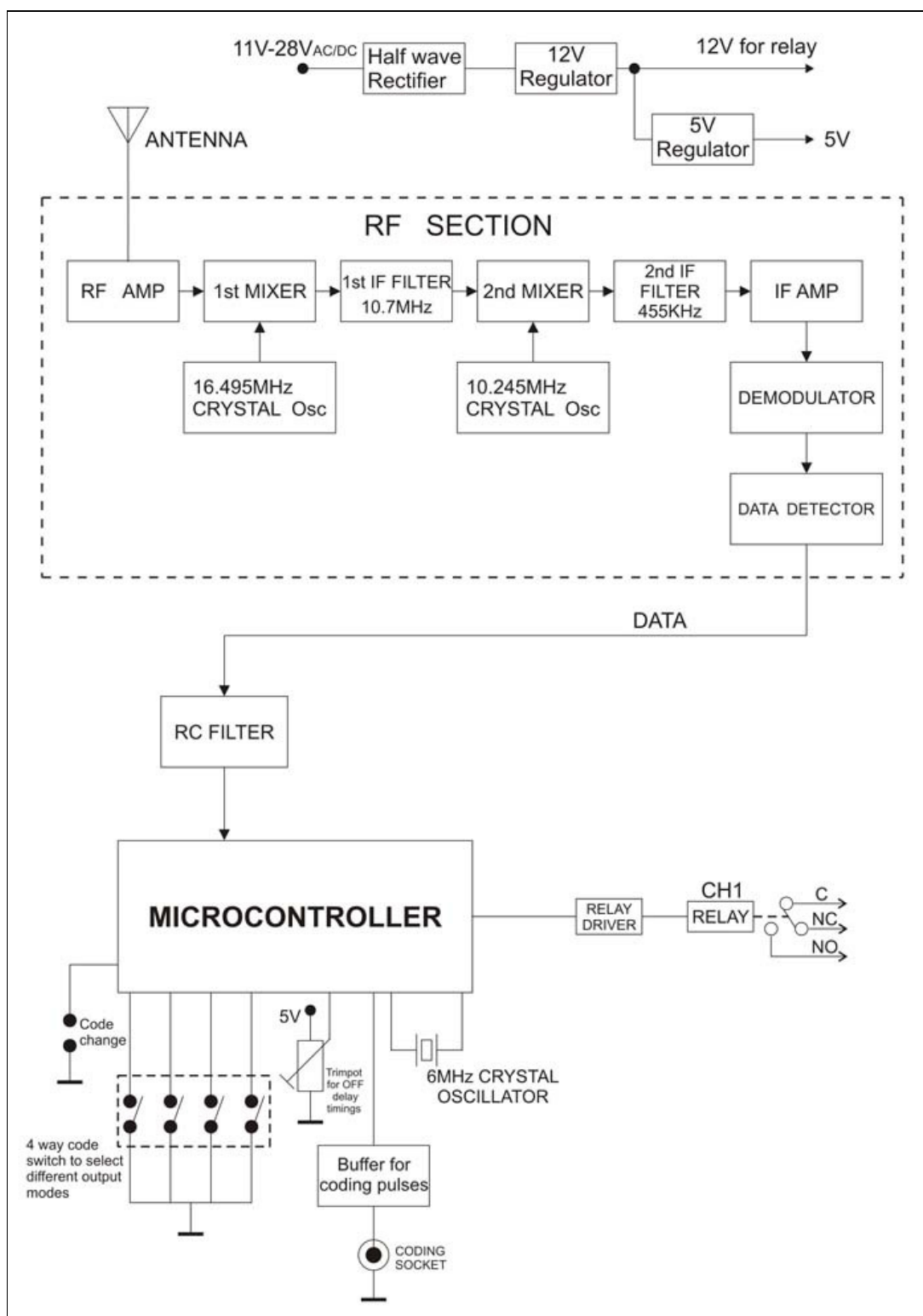
Products in the Range

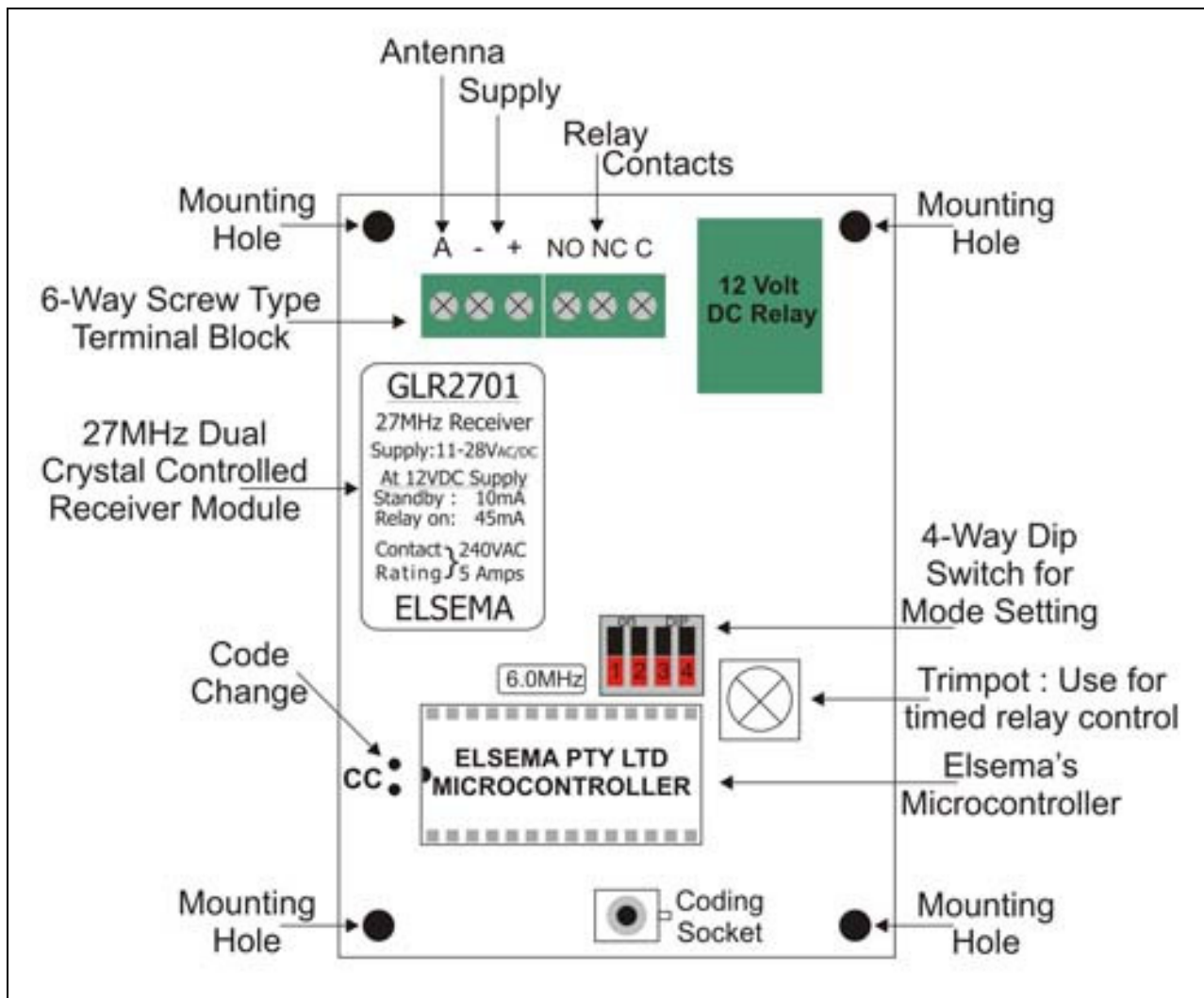
				
GLR2701 1-Channel	GLR2701240 1-Channel, 240V	GLR2702 2-Channel	GLR2702240 2-Channel, 240V	GLR2703 3-Channel Receiver
				
GLR2704 4-Channel Receiver	GLR2708 8-Channel	GLR2708R 8-Channel with Relay Output	GLR2701SS GLR2702SS 1,2 -Channel, Open Collector Output	GLR2701SST GLR2702SST 1,2 -Channel, Open Collector Output

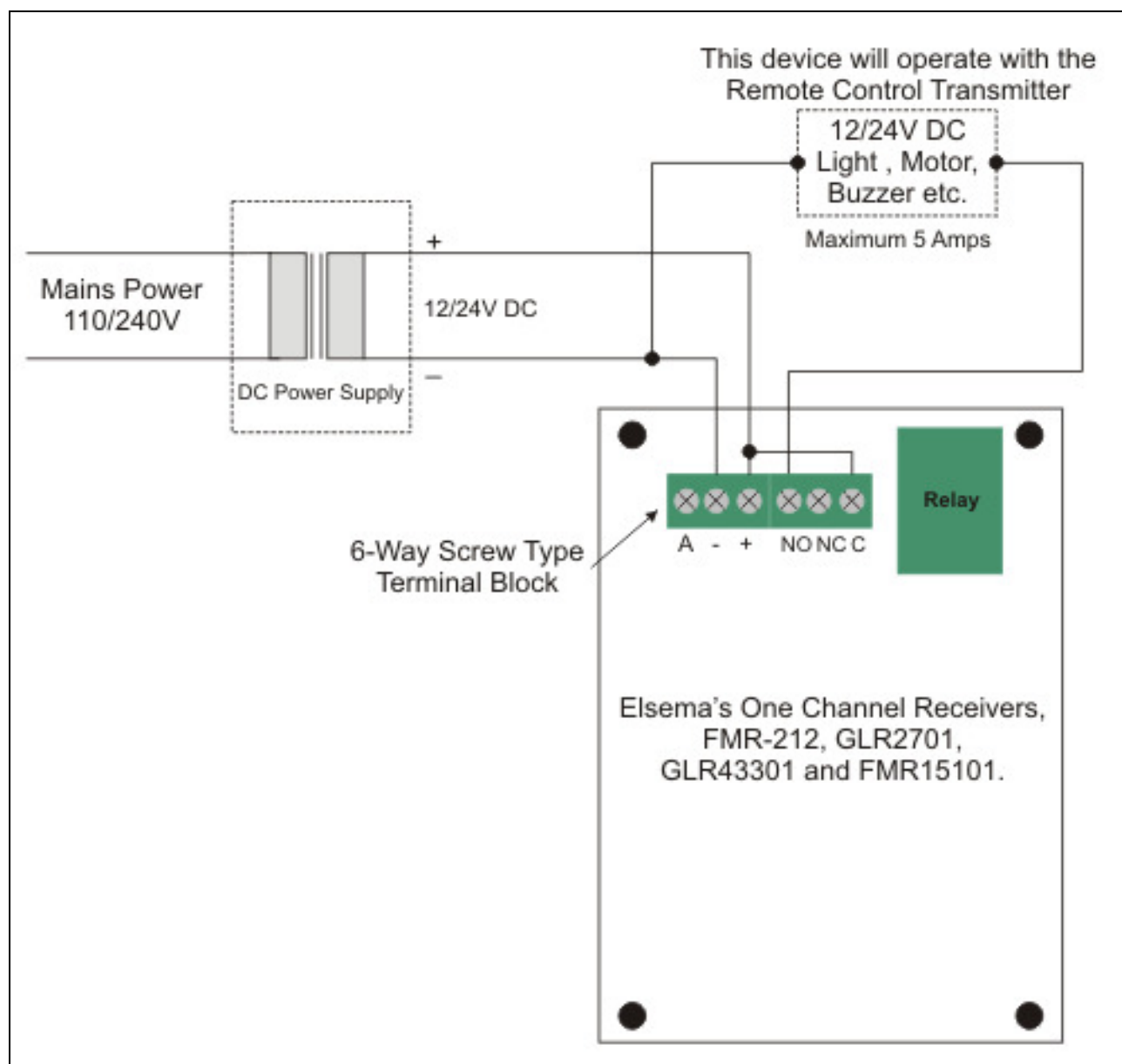
Technical Data

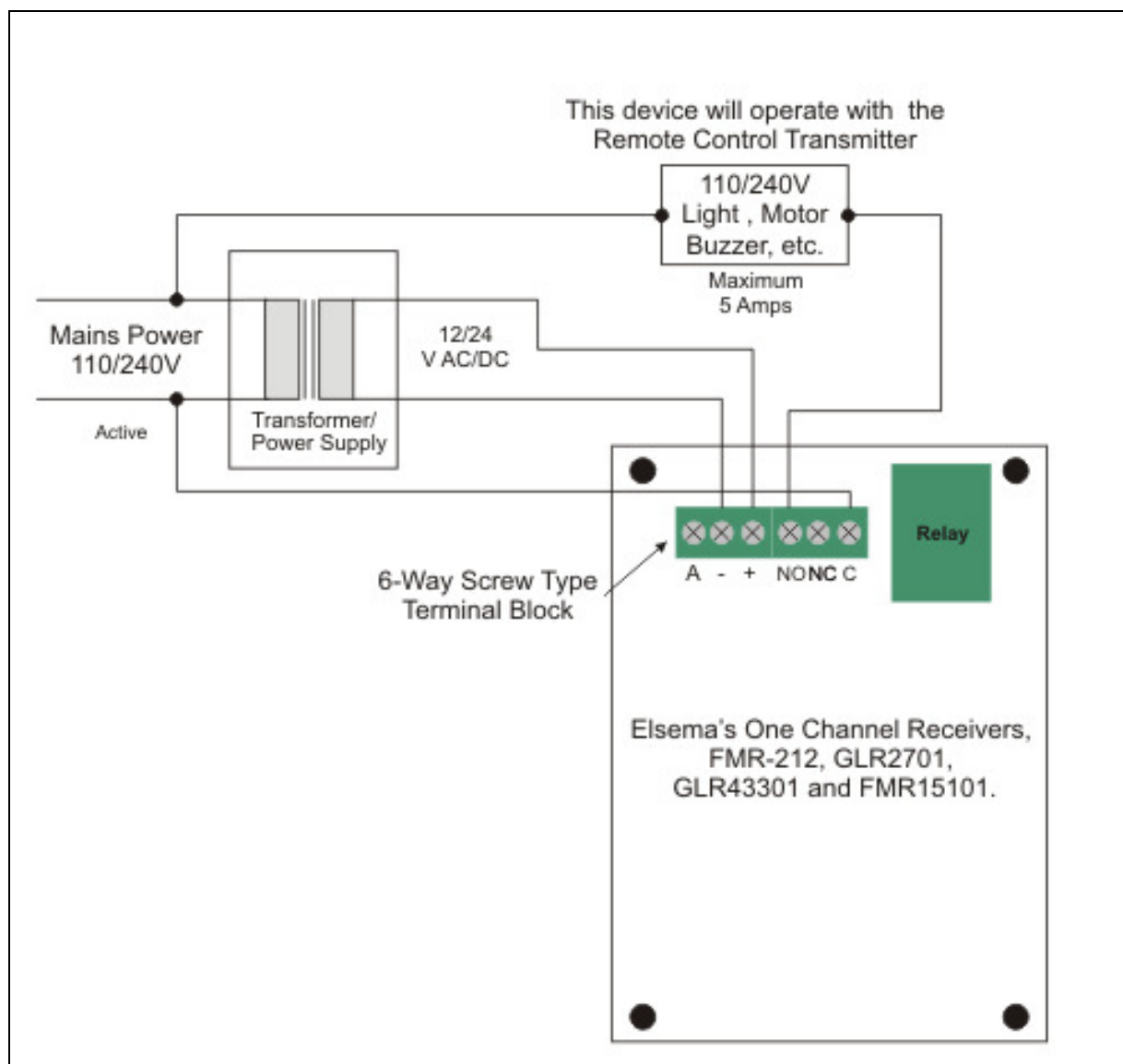
Supply Voltage	11.0 to 28 VDC and 10.0 to 28 VAC. Supply lines should be less than 3 metres long to comply with radio frequency authorities.
Current Consumption	14mA standby at 12 VDC Supply 45mA if relay "ON" at 12 VDC Supply
Receiving Frequency	27.195MHz
Operating Temperature Range	-5 to 50°C
Sensitivity	1uV (for output to activate)
Decoding System	Microcontroller based 96-bit word
Code Combinations	4,294,967,296
Outputs	Change over relay output, rated at 8 Amps/240 Volts
Connections	6-way screw type terminal block
Antenna	50 ohms, 27MHz CB-Antenna or approximately 1m long & 1mm thick piece of wire
Dimensions	96 x 70 x 20mm
Mounting Hole Size	3.97mm or 5/32"
Weight	77g
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.

Block Diagram





GLR2701 12/24 VAC/DC Application

GLR2701 240/110 VAC Application

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.