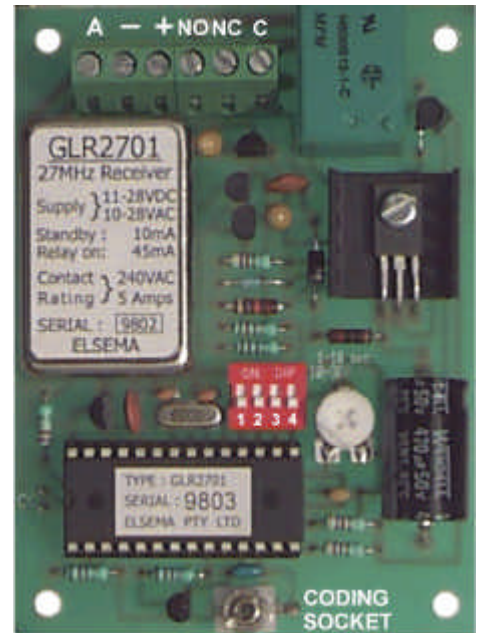


# GLR2701

## SINGLE CHANNEL 27MHz GIGALINK™ RECEIVER

The GIGALINK™, GLR2701 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 GLR2701 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 GLR2701 microcontroller in-built code programming system automatically selects the programming mode that provides flexibility in programming the receiver channel to different transmitter channels. In programming mode the receiver sends a random code to program the transmitter channel. Momentary joining the two CC pins on the receiver board sets the channel to a random code. To program the receiver to the transmitter channel(s) follow the steps outlined in the transmitter instructions.

The receiver power must be connected when code programming.

### Dual Crystal Control

The GLR2701 is crystal controlled using dual conversion. Dual conversion is where the received frequency is mixed twice, using a crystal at both mixing stages. This results in less interference, enabling the receiver to operate in noisy industrial applications, improves operating performance, which allows the receiver to pass EMC and stringent radio regulations around the world.

### AC/DC Supply, Antenna and Relay Connections

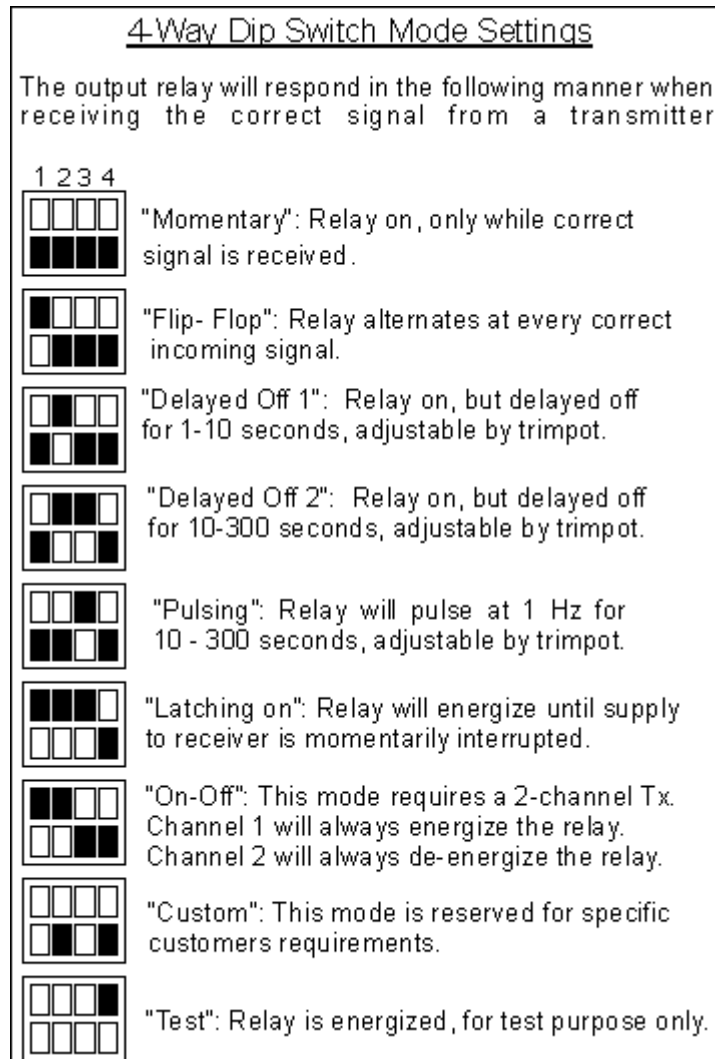
AC/DC power supply, antenna and relay connections are via a six-way screw-type terminal block. Do not connect the supply to the 2.5-mm coding socket since connection may damage the microcontroller.

### Applications

The GLR2701 receiver single channel 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.

## Different Modes for the Output

Modes are user selectable from the 4-way dip switch, shown below.



## 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.

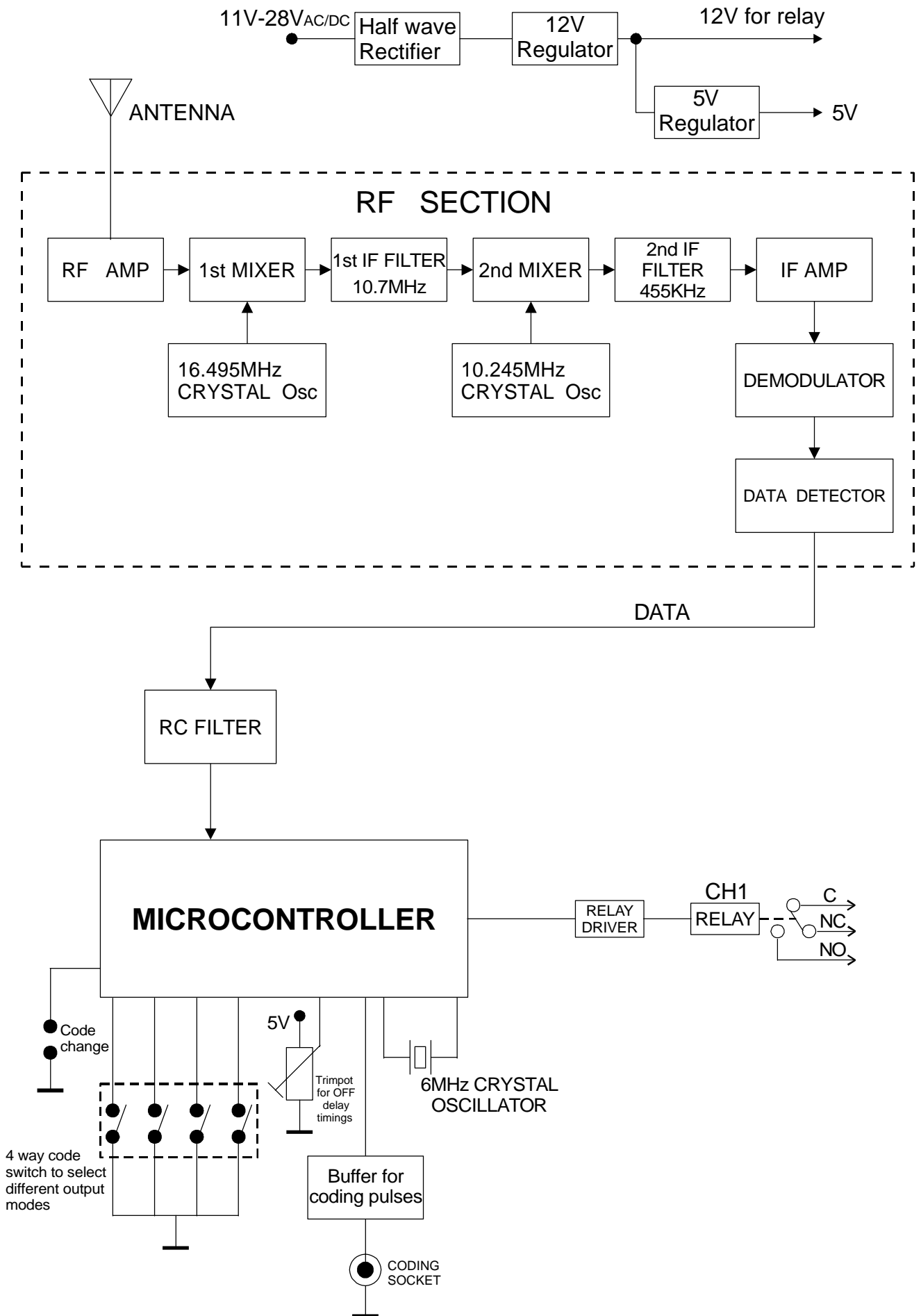
## Case

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

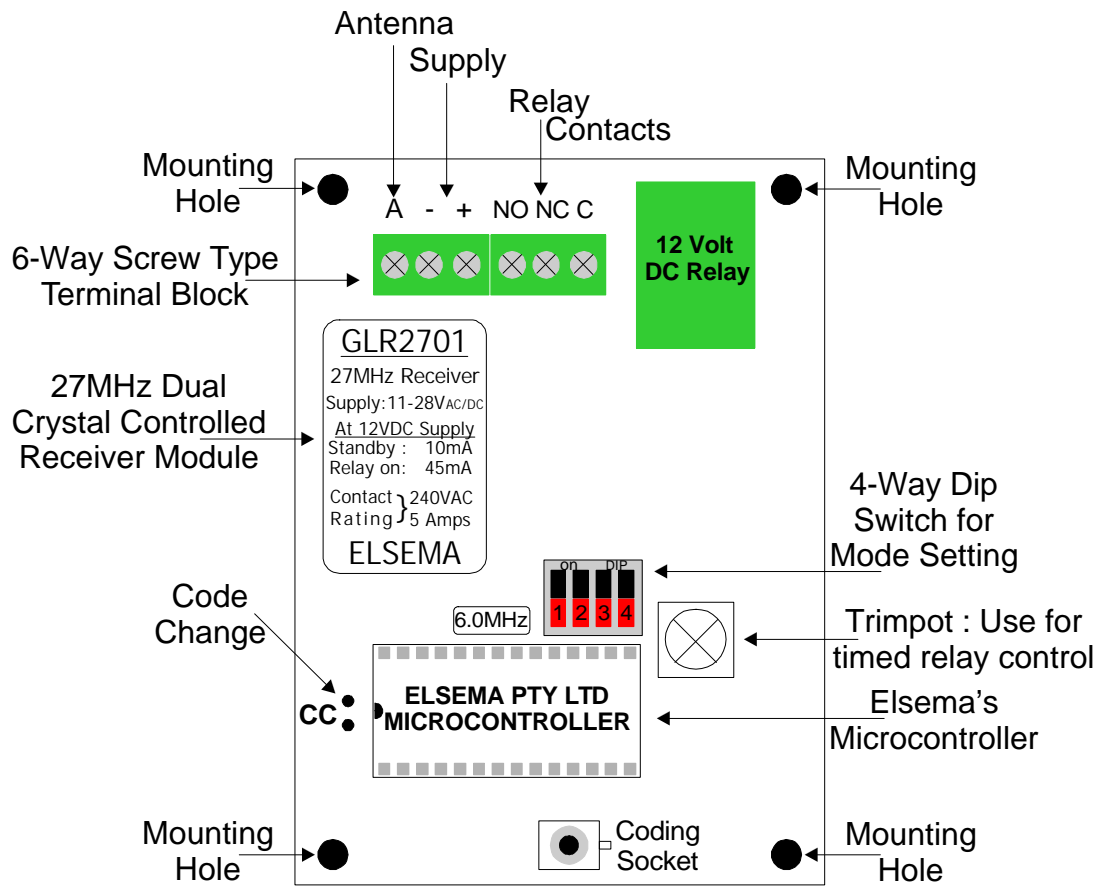
## TECHNICAL DATA ON 27MHz GLR2701

SUPPLY VOLTAGE :	11.0 to 28 VDC and 10.0 to 28 VAC. Can use Elsema AC power pack (PP12 or PP24). Supply lines should be less than 3 metres long to comply with radio frequency authorities.
CURRENT CONSUMPTION :	10mA standby at 12 VDC Supply 45mA if relay "ON" at 12 VDC Supply
RECEIVER TYPE :	Dual Conversion Superheterodyne
RECEIVING FREQUENCY :	27.195 MHz (Other frequencies available on 27.045, 27.145 and 27.455 MHz. The 27.455 frequency is not available for Australia).
TYPE OF CRYSTALS USED :	10.245 MHz, Fundamental, 20pf, 30ppm. 16.495 MHz, Fundamental, 20pf, 30ppm.
OPERATING TEMPERATURE RANGE :	-5 to +50°.
1 <sup>ST</sup> IF FREQUENCY :	10.7 MHz
2 <sup>nd</sup> IF FREQUENCY :	455 KHz
SELECTIVITY :	-6 dB at +- 5KHz and -20dB at +- 6KHz
IMAGE REJECTION :	At 26.285MHz better than -60dB
SENSITIVITY :	1µV (for relay to activate).
TYPE OF DEMODULATION :	Narrow-band-width Frequency Modulation (FM).
OCCUPIED BAND WIDTH :	+ - 5 KHz
DECODING SYSTEM :	Microcontroller based 96-bit word.
CODE COMBINATIONS :	4,294,967,296
OUTPUTS :	Change over relay output, rated at 5 Amps/240 Volts
CONNECTIONS :	6-way screw type terminal block
ANTENNA :	50 ohms, 27 MHz CB-Antenna or piece of approximately 1 metre of wire.
DIMENSIONS :	96 X 70 X 20 mm
MOUNTING HOLE SIZE :	3.97 mm or 5/32"
WEIGHT :	77 grams
USEABLE TRANSMITTERS :	All Elsema type 27MHz GLT-... series.
USEABLE OPERATING RANGE :	Up to 350 metres with proper 50 ohms, 27 MHz CB-Antenna . Up to 200 metres with 1 metre long antenna wire. Antenna wire should be extended and away from metal. Ranges assume line-of-sight operation.

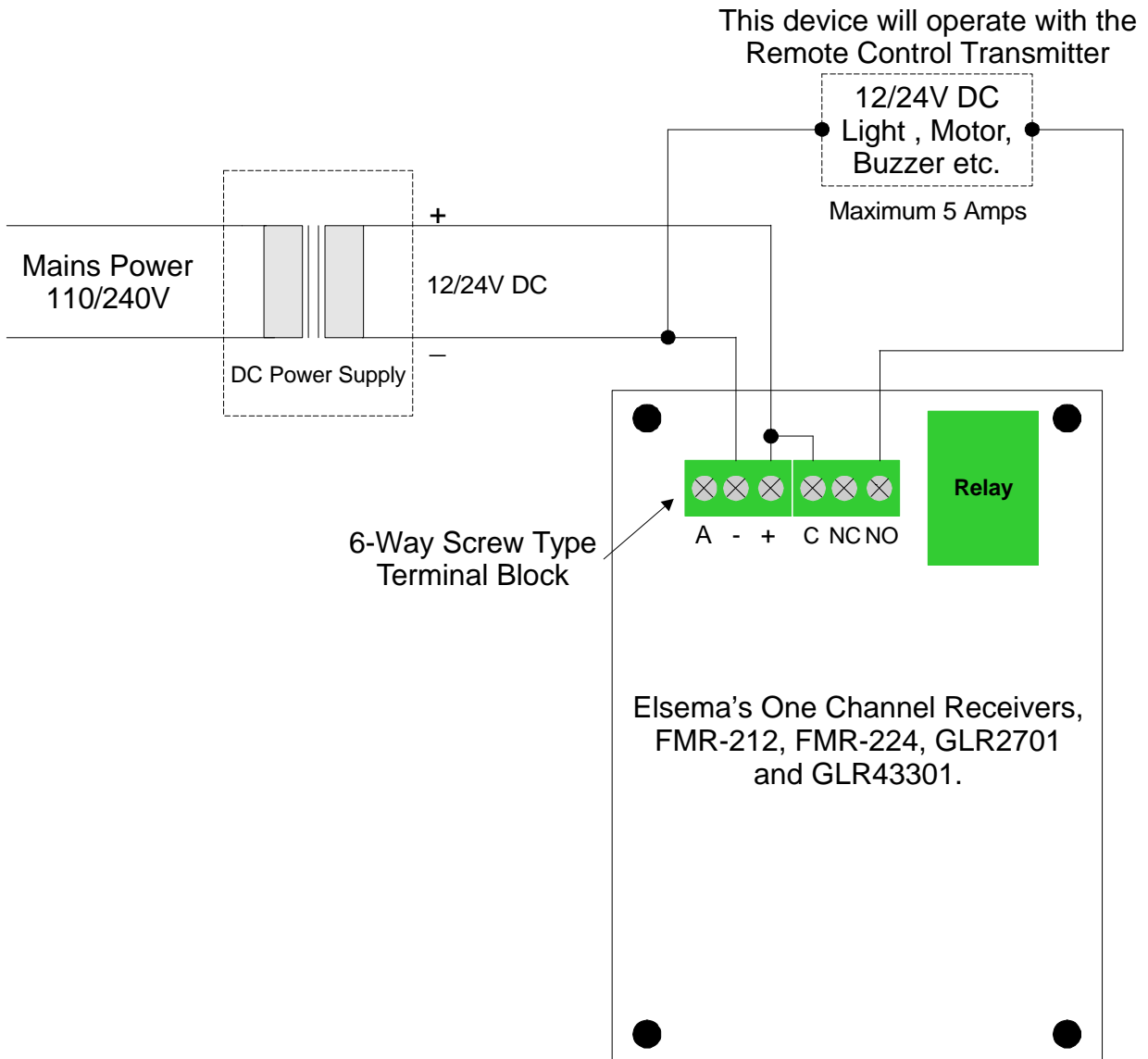
# GLR2701 BLOCK DIAGRAM



# GLR2701 DIAGRAM



# GLR2701 12/24 VAC/DC APPLICATION



# GLR2701 240/110 VAC APPLICATION

