GLR4330812R

8-Channel 433MHz Gigalink™ Receiver with Relay Outputs

Features

- Wide supply connection – 11.0 to 28.0 Volts AC/DC
- Highly sensitive receiver input stage. When used with GLT433… transmitters an operating range of 350 metres (980 ft) is possible.
- Eight relay outputs. All outputs can be operated simultaneously.
- Crystal controlled for high stability and performance.
- Uses micro-controller technology that can be re-programmed to suit unique applications.
- Momentary, flip-flop and latching output modes is user selectable.

Applications

- Automatic gates.
- Security systems.
- Timer controlled outputs.
- Simple on/off functions.

Description

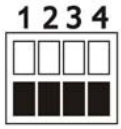
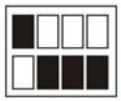
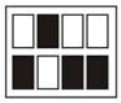
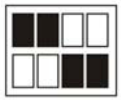
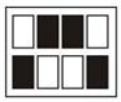
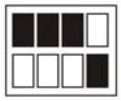
The GIGALINK™, GLR4330812R is the **most advanced Remote Control technology** available in the world today. GIGALINK™ is an invention that has revolutionised the entire Remote Control technology including Elsema's earlier version of FMT- … and FMR- … series.

The GLR4330812r 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 and ability to program any number of transmitters to a receiver adds up to the most advanced and secure Remote Control available.

Different Modes for each Output

Modes are user selectable from the 4-way dip switch, shown below.
(Dipswitch 4 is reserved for specific customer mode. Normally not used.)

DIP Switch Mode Settings The output relay will respond in the following manner when receiving the correct signal from a transmitter	
	"All Momentary": Relay on, only while correct signal is received
	"All Flip-Flop": Outputs alternate at every correct incoming signal
	"Momentary & Flip-Flop": Outputs 1-4 are momentary & 5-8 are flip-flop
	"Latching on": Outputs will be on until supply to receiver is momentarily interrupted
	"Momentary & Flip-Flop": Outputs 1-6 are momentary & 7-8 are flip-flop
	"Momentary & Flip-Flop": Outputs 1-2 are momentary & 3-8 are flip-flop
	"Momentary & Flip-Flop": Outputs 1-3 are momentary & 4-8 are flip-flop
	"Latching on": Output 1 is latching & 2-8 are momentary

*** Dipswitch 4 is reserved**

AC/DC Supply and Antenna

AC/DC power supply and antenna is connected to the 3-way terminal block. The shield of the antenna coaxial cable should be connected to the minus (-) terminal block.
Do not connect the AC/DC supply to the 2.5-mm coding socket since connection may damage the microcontroller.

Channels

The eight channels are relay outputs using the ULN2803 Integrated Circuit. This IC is inserted to a socket that enables the user to easily change the output stage in case of a damaged output. The ULN2803 IC is available from Elsema.
Simultaneous channel operation is possible with the same transmitter.

Code Programming

The microcontroller built-in code programming system automatically selects the programming mode that provides flexibility in programming each receiver channel to different transmitter channels. 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 all eight channels to a random code. To program the receiver to the transmitter channel(s) follow the steps outlined in the receiver instructions.

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 GLR4330812R can be supplied without a case, this allows the receiver to be integrated according to your needs. The C160 case (weather proof) can be used to enclose the GLR4330812R receiver. The receiver with a case is known as a GLR4330812RE.

Products in the Range

				
GLR43301 1-Channel	**GLR43301240** 1-Channel, 240V	**GLR43302** 2-Channel	**GLR43302240** 2-Channel, 240V	**GLR4330312,** 3-Channel, 12 - 24V
				
GLR4330412 4-Channel, 12 - 24V	**GLR43304240** 4-Channel, 240V	**GLR43308** 8-Channel	**GLR4330812** 8-Channel, 12-24V Relay Output	**GLR43301SS** **GLR43302SS** Receiver with 6-way female connector **GLR43301SST** **GLR43302SST** Receiver with terminal block

Technical Data

Supply Voltage	11.0 - 28.0 VAC/DC. Can use Elsema DC power supply 12PP1000 or 24PP. Supply lines should be less than 3 metres long to comply with radio frequency authorities
Current Consumption	10mA standby, 340mA if all outputs “On”
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 x 10^9 codes)
Code Combinations	4,294,967,296
Outputs	Eight change over relay outputs, each rated at 8 Amps/240 Volts
Connections	Screw type terminal block.
Antenna	Elsema’s ANT433MHz series antennas or piece of approximately 690 mm long wire for short range applications.
Dimensions	130 x 94 x 42mm
Mounting hole size	3.97 mm or 5/32"
Mounting Hole Spacing	Length 120 mm Width 60 mm
Weight	240g
Microcontroller	Can be re-programmed to suit your customised needs
Useable Transmitters	All Elsema Type 433MHz GLT-... series

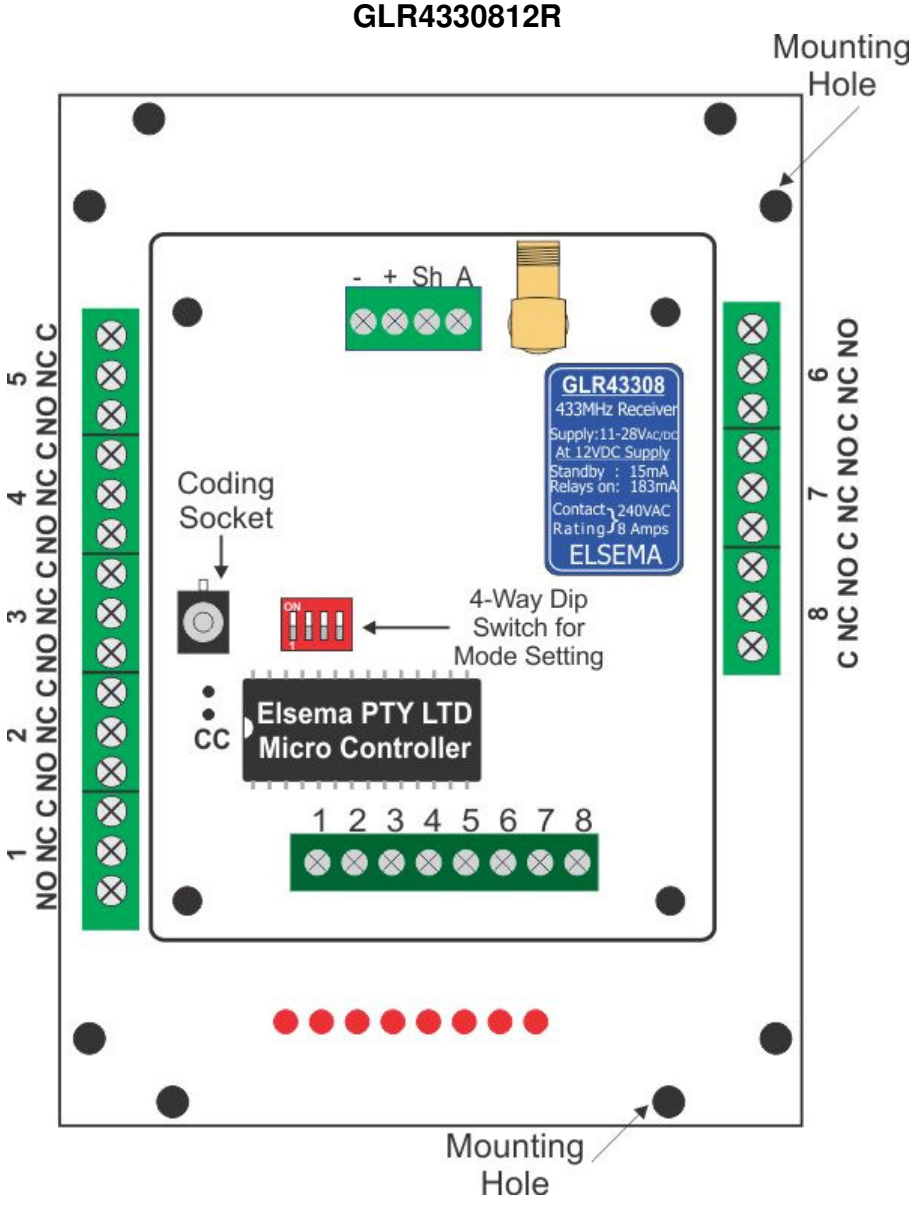
Available Frequencies

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

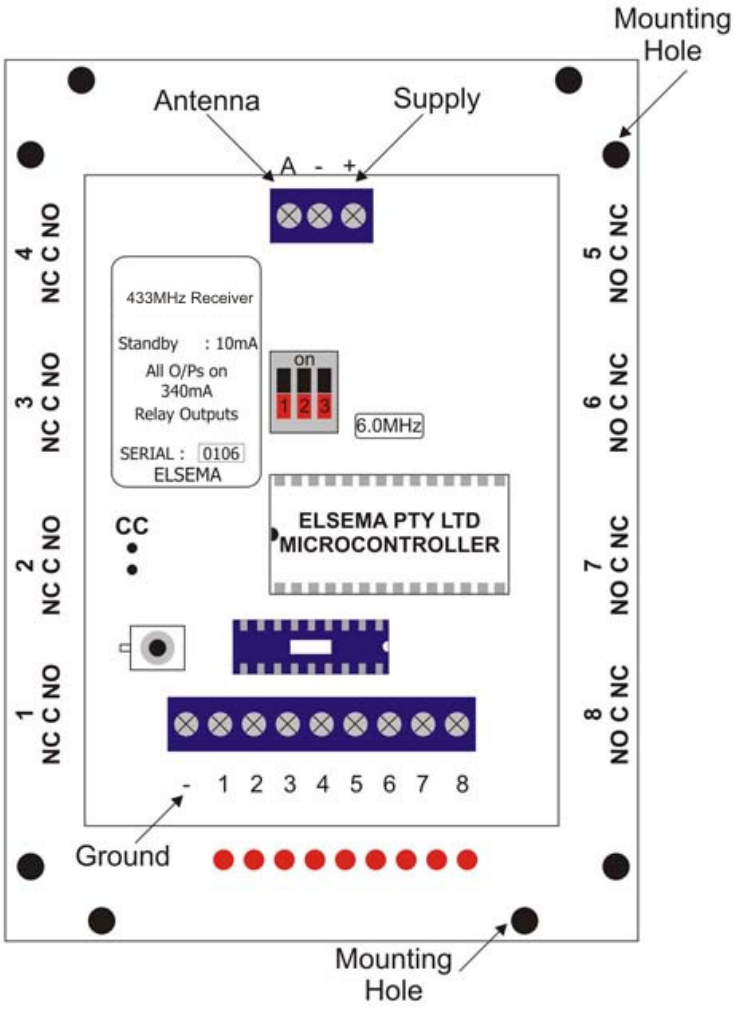
Special Frequency products can be made upon request. There is a minimum quantity order of 10. Please quote Correct SF number when ordering transmitters on special frequencies.

Block Diagram

GLR4330812R



GLR4330812R/GLR4330824R (Old Version)



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