

GLR08

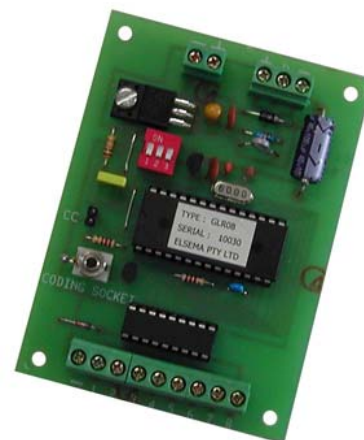
Gigalink™ 8-Channel Decoder for R433 Receiver

Features

- Easy connection with R433 to form an 8-channel receiver
- Receiver with 8 solid state outputs

Applications

- security, industrial machine monitoring,
crane control, level monitoring, multiple on/off functions



Description

The GLR08 can be connected with the R433 data receiver to form an 8-channel receiver. Connecting both units is simple. The GLR08 has a 3-way terminal block marked as + D - which should be connected directly to the R433 3-way terminal block marked as + D - . If the R433 is with a plastic case the connection is via a socket which is marked + D - . This connection is graphically shown at the bottom. The receiver can be used with the GLT08 / T433 transmitter to give an operating range of 1 Kilometres, line of sight, for each of the eight channels.

Each channel is addressed via the terminal block or the IC socket. The channel is activated when the corresponding channel number is shorted to ground. Each of the eight digital channel codes is stored in a microcontroller, which replaces the traditional dip switch.

The GLR08 and R433 can be purchased with Elsema's **C160** weatherproof case and **ANT433S UHF antenna**.

Channels

The eight channels are solid state 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. Output 1 being at the left and output eight to the right of the terminal block.

Different Modes for each Output

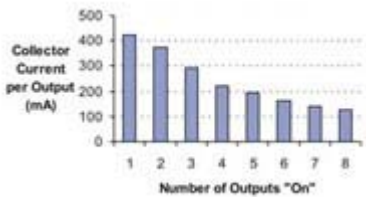
Modes are user selectable from the 3-way dip switch, shown below.

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

Case

The GLR08 can be supplied with or without a case. This allows the receiver to be integrated according to your needs.

Technical Data

Supply Voltage	10.0 to 28 V AC/DC. Absolute maximum DC 40 Volts. Can use Elsema 12-volt AC power pack (12PP). Supply lines should be less than 3 metres long to comply with radio frequency authorities.																		
Current Consumption	5mA standby, 16mA if all outputs "On"																		
Operating Temperature Range	-5 to 50°C																		
Decoding System	Microcontroller (32-bit word 4.29 x 10 ⁹ codes)																		
Code Combinations	4,294,967,296																		
Outputs	<p>Eight Open Collectors (See chart for Collector Currents)</p>  <table border="1"> <caption>Collector Current per Output (mA) vs Number of Outputs "On"</caption> <thead> <tr> <th>Number of Outputs "On"</th> <th>Collector Current per Output (mA)</th> </tr> </thead> <tbody> <tr><td>1</td><td>400</td></tr> <tr><td>2</td><td>350</td></tr> <tr><td>3</td><td>300</td></tr> <tr><td>4</td><td>250</td></tr> <tr><td>5</td><td>200</td></tr> <tr><td>6</td><td>175</td></tr> <tr><td>7</td><td>150</td></tr> <tr><td>8</td><td>125</td></tr> </tbody> </table> <p>Chart indicates that eight outputs can be ON simultaneously with each output collector current being 125mA. Outputs can hold 50 Volts in "Off" state.</p>	Number of Outputs "On"	Collector Current per Output (mA)	1	400	2	350	3	300	4	250	5	200	6	175	7	150	8	125
Number of Outputs "On"	Collector Current per Output (mA)																		
1	400																		
2	350																		
3	300																		
4	250																		
5	200																		
6	175																		
7	150																		
8	125																		
Connections	Supply: 3-way screw type terminal block Eight Outputs: 9 -way screw type terminal block. (8 open collectors plus Ground).																		
Dimensions	96 X 70 X 15 mm																		
Mounting hole size	3.97 mm or 5/32"																		
Weight	55g																		
Useable Transmitters	All Elsema Type 433MHz GLT-... series																		

Block Diagram

