

# GLR43303, GLR43304, GLR2703 and GLR2704

Setup and programming instructions for 3 and 4 channel Gigalink<sup>™</sup> receivers

**Programming Videos** 





#### **NOTES**

#### IMPORTANT WARNING AND SAFETY INSTRUCTIONS

All installations and testing must be done only after reading and understanding all instructions carefully. All wirings should be done only by trained technical personnel. Failing to follow instructions and the safety warnings may result in serious injury and/or damage to property.

Elsema Pty Ltd shall not be liable for any injury, damage, cost, expense or any claim whatsoever to any person or property which may result from improper use or installation of this product. Risk in the goods purchased shall unless otherwise agreed in written pass to the buyer upon delivery of the goods. Any figures or estimates given for performance of goods are based upon the company's experience and is what the company obtains on tests. The company will not accept liability for failure to comply with the figures or estimates due to the nature of variable conditions affecting for example Radio Remote Controls.

Please keep this setup instruction for future reference.

## GLR43303, GLR43304, GLR2703 and GLR2704

Setup and programming instructions for 3 and 4 channel Gigalink  $\ensuremath{^{\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!}}$  receivers

#### **FEATURES**

- > 3 or 4 channel outputs
- > Wide Supply Voltage, 11.0 to 28.0 VAC/DC
- > All outputs can be operated simultaneously
- > Over 4 billion code combinations
- > Highly sensitive receiver input stage
- > Crystal controlled for high reliability
- > Can store unlimited number of transmitters
- > Uses micro-controller technology that can be re-programmed to suit unique applications
- > Momentary, latching and security latching output modes is user selectable
- > Optional QM150 bracket available for easy mounting to cases or walls
- > E version receiver available with a weatherproof case

### DESCRIPTION

This Gigalink<sup>™</sup> receiver gives you three or four relay outputs that can switch currents up to 8 Amps each. There is an on board switch to test each relay and a LED to indicate when the relay is "on". The receiver has a power "on" LED to indicate that the correct supply voltage is connected. The receiver's micro-controller can store unlimited number of transmitters with a high security level using the encrypted 32-bit digital code. Included with the receiver is the Gigalink<sup>™</sup> programming cable.

TECHNICAL DATA	
Supply Voltage	11.0 to 28.0 VAC/DC. Can use Elsema's DC or AC power supply, 12PP1000 or 24PP.
Frequencies for GLR43303 & 04 Frequency for GLR2703 & 04	433.920 (Standard), 433.664, 433.408, 433.152MHz 27.195MHz
Relay Output	Four change over relay outputs, rated at 8 Amps / 240V
Recommended Antenna	ANT433 series (433MHz Series) or ANT27 series (27MHz Series)
Compatible Transmitters	GLT433 MHz series, GLT27 MHz series

## **PROGRAMMING INSTRUCTIONS**

The transmitter and receiver can be multi or single channel programmed

#### **Multi-channel Programming**

This is used to program all channels from a multi channel receiver to a multi channel transmitter. Multi-channel programming can be achieved by following the steps below:

- Step 1: Connect power to the GIGALINK<sup>™</sup> receiver. Make sure all switches on the mode dipswitch are off.
- Step 2: Momentarily short the two CC pins on the receiver board. This sets all the channels to a random code. If there are transmitters previously programmed, they will have to be re-programmed when CC pins are shorted. Do not do this step if you want to keep previously programmed transmitters.
- **Step 3:** Connect the multi channel transmitter to the multi channel receiver by inserting the GIGALINK<sup>™</sup> cable into the transmitters and receivers 2.5-mm Coding socket. (This will activate the programming mode and is indicated by the red light (LED), on the transmitter that must remain "on").
- Step 4: Activate any two channels simultaneously on the multi channel transmitter for one second, LED should blink twice to confirm code programming and then switch "off".
- **Step 5:** Disconnect GIGALINK<sup>™</sup> cable.

Repeat steps 3 to 5 to program another multi channel transmitter.

If you are programming another transmitter, do not short out the CC pins. Shorting out the CC pins will delete all previously programmed transmitters.

## **SINGLE CHANNEL PROGRAMMING**

This is used for programming one channel at a time to the transmitter. Single channel programming can be achieved by following the steps below:

- Step 1: Connect power to the GIGALINK<sup>™</sup> receiver. Make sure all switches on the mode dipswitch are off.
- Step 2: Momentarily short the two CC pins on the receiver board. This sets all the channels to a random code. If there are transmitters previously programmed, they will have to be re-programmed when CC pins are shorted. Do not do this step if you want to keep previously programmed transmitters.
- **Step 3:** Select the receiver channel, to be programmed, by setting the 4-way dipswitch. See dipswitch table below.

Dipswitch Setting				Receiver Channel (Output Relay)	Receiver Type
1	2	3	4		
Off	Off	Off	Off	1	GLR43303,GLR43304, GLR2703, GLR2704
On	Off	Off	Off	2	GLR43303,GLR43304, GLR2703, GLR2704
Off	On	Off	Off	3	GLR43303,GLR43304, GLR2703, GLR2704
On	On	Off	Off	4	GLR43304, GLR2704

- **Step 4:** Connect the transmitter to the receiver by inserting the GIGALINK<sup>™</sup> cable into the transmitters and receivers 2.5-mm Coding socket. (This will activate the programming mode and is indicated by the red light (LED) on the transmitter that must remain "on").
- Step 5: Activate one of the selected channels on the transmitter for approximately one second, LED should blink twice to confirm code programming and then switch "off".
- **Step 6:** Disconnect GIGALINK<sup>™</sup> cable.

Repeat steps 3 to 6 to program another transmitter channel.

If you are programming another transmitter, do not short out the CC pins. Shorting out the CC pins will delete all previously programmed transmitters.

## SPECIAL PROGRAMMING FEATURE FOR GIGALINK™

#### **Forward Programming**

GIGALINK<sup>™</sup> receivers have an additional programming feature, known as forward programming. This feature allows the user to program the transmitter code into the receivers. This will enable the transmitters to activate unlimited number of receivers simultaneously.

#### **Forward Programming Steps:**

- **Step 1:** Connect power to the receiver and transmitter.
- **Step 2:** Place a jumper across the CC pins of the receiver.
- **Step 3:** Connect the transmitter and receiver using the coding cable.
- **Step 4:** Press the transmitter button for 2 seconds.
- **Step 5:** Remove the coding cable.
- **Step 6:** Remove the jumper from the CC pin.

The receiver is now programmed with the transmitter's code. Repeat the above steps to program another receiver.

## **DIFFERENT MODES FOR THE OUTPUT**

Modes are user selectable from the 4-way dipswitch. **Dipswitch 1 corresponds to output channel 1 and dipswitch 2 corresponds to output channel 2 and so on**.

Momentary Mode	If the dipswitch is "off" the output will be in momentary mode. (Relay is activated for as long as the transmitter button is pressed).
Latching Mode	If the dipswitch is "on" the output will be in latching mode. (Relay is activated when the transmitter button is pressed and will switch off only after the transmitter button is pressed again).
Security Latching Mode	If security latching is required (Relay stays on until power is removed) the latching link should be inserted and soldered into the two holes to the right of the 4-way dipswitch. This will enable the corresponding outputs to security latching.

## **ACCESSORIES AVAILABLE**



Weatherproof Case for receiver unit



**Gigalink™ Coding Cable** For coding Gigalink transmitters to receivers



SUPREG12, SUPREG24 Supply and Battery charger. Ideal for charging backup battery and supplying the receiver.



Suitable Antennas ANT27 series (27MHz Series) or ANT433 series (433MHz Series)



Suitable Power packs 12PP-1000, 12V DC 1000mA 24PP, 24V DC 500mA.



**QM150** Quick Mount for easy mounting of receivers on walls.

## TROUBLESHOOTING

This section contains helpful troubleshooting tips and solutions.

Symptom	Solution
Receiver not responding to transmitter after programming.	Try to program the transmitter again, but this time with the battery connected to the transmitter. Check if GIGALINK <sup>™</sup> cable is inserted correctly.
Transmitter activates wrong channel on a multi-channel receiver.	Wrong dipswitch setting while programming the receiver. Use the dipswitch table and program again.
Transmitter has short range.	Check receiver antenna connection. If you are using a shielded coax cable, check that the shield is connected to the negative and the coaxial core to the antenna terminal.
LED is flashing on the transmitter.	Replace battery.

## **CUSTOMER SUPPORT**

If your transmitter and receiver are still not operating properly, contact Elsema's support office at:

Phone: +61 (2) 9609 4668

Fax: +61 (2) 9725 2663

or you can visit our web site at www.elsema.com for the latest updates.

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