# GLR43301SS, GLR43302SS, GLR2701SS and GLR2702SS

## Setup and programming instructions
### for 1 and 2 channel Gigalink™ receivers

**Programming Videos**



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## NOTES

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## 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.

# GLR43301SS, GLR43302SS, GLR2701SS and GLR2702SS

**Setup and programming instructions for 1 and 2 channel Gigalink™ receivers**

## FEATURES

› One or two channel outputs
› Open Collector Output
› Available with either a female plug-in or terminal block connector
› Highly sensitive receiver input stage
› Crystal controlled for high reliability
› Can store unlimited number of transmitters
› Modes include momentary and latching

## DESCRIPTION

This Gigalink™ receiver gives you an open collector output switching to ground with a capacity of 100mA 40 VDC. The GLR43301SS version uses an industry standard female 6-pin connector allowing you to easily integrate a receiver into your applications.

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™ programming cable.

## TECHNICAL DATA

| | |
|---|---|
| **Supply Voltage** | 7.5-28 VDC |
| **Frequencies for GLR43301SS** <br> **Frequency for GLR2701SS** | 433.920 (Standard), 433.664, 433.408, 433.152MHz <br> 27.195MHz |
| **Output** | 1 Channel: 1 Open Collector Transistor Output <br> 2 Channel: 2 Open Collector Transistor Outputs |
| **Output Transistor** | Maximun switching 100mA at 40VDC |
| **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™ 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™ 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™ 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™ 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 2-way dip switch. See dip switch table below.

| Dip Switch Setting | | Receiver Output Channel |
|---|---|---|
| 1 | 2 | |
| Off | Off | 1 |
| On | Off | 2* |

\* Use only for the GLR43302SS/ GLR2702SS

**Step 4:** Connect the transmitter to the receiver by inserting the GIGALINK™ 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™ 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™ 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 2-way dipswitch. **Dipswitch 1 corresponds to output channel 1 and dipswitch 2 corresponds to output channel 2**.

| | |
|---|---|
| **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 security latching link should be inserted and soldered into the two holes to the right of the 2-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



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



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

## 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. <br> Check if GIGALINK™ cable is inserted correctly. |
| **Transmitter activates wrong channel on a multi-channel receiver.** | Wrong dip switch setting while programming the receiver. Use the dip switch 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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