ACS-102

Wireless two channel alarm system set.

Instruction manual and technical specifications

G.S.N. Electronic Company Ltd.

ACS-102 Receiver features.

- Two independent channels
- Four working modes for channel:

a) Alarm mode (SECURITY)

b) Switching mode (ON/OF)

c) Hold mode (CONTINUOUS)

d) Pulse mode (PULSE) 1second

- Signal microprocessor treatment
- Event memory (15 min)
- Easy accessible receiver training
- Protection against non-authorized access
- Light indication
- Tiny case

Purpose of the product.

ACS 102 - Wireless dual channel receiver with remote control is designed for use with security alarm systems and for other applications as electrical gates, sliding doors, barriers, and etc.

➢ Receiver has 4 working modes for each channel:

a) Alarm mode. All jumpers are set.

b) Switching mode. No "TGL" jumper.

c) Hold mode. No "SEC" jumper.

d) Pulse mode. No "TGL" and "SEC" jumpers.

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a) ALARM MODE (SECURITY)

This mode is use in the security systems.

➢   Mode features:

1. Protection from loss of power supply.

Relay is working in the active mode, so in case loss of power supply or intrusion it will open its contacts.

2. Last event memory.

As you push the button on the remote control you will see the LED blinking on the receiver - the timer of the memory is on. Timer's operating time is15 minutes. After this period of time memory will be automatically erased.

Attention!

The memory of the receiver fix only the last event, erasing the previous one.

3. Protection from opening.

In this mode a tamper position is controlled by the microprocessor.
It is not connected to the electrical circuits, which makes it more reliable and long lasting. In the alarm mode the alarm will turn on at a push of any button or at opening of the receiver.
The relay will not be powered for 3 sec., then the power will be back and the device is ready for further operation.

Attention!

In the alarm mode receiver will not operate if the cover is removed.

b) SWITCHING MODE (ON/OF)

This mode is designed for use with single command systems for controlling various devices. Each button of the remote control refers to one of the positions of the relay "ON" or "OFF".

c) HOLD MODE (CONTINUOUS)

Relay activates by pushing and holding the remote control button, on release of a button relay stop operating e.g. opening or closing relay circuit.

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d) PULSE MODE (PULSE)

On pushing of one of the remote control buttons for this channel relay activates for 1 second.

Characteristics of ACS-102

Receiver ACS-102 is capable to memorize up to 165 different codes, so it can work with 165 different remote controls transmitters that have different identity codes. An attempt to memorize 166th code will be ignored.

Dual channel remote control.

Remote control has two buttons for two channels of the receiver respectively. Each channel is an internal relay of the receiver.

LED indications.

1. LED is on constantly – receiver is operating.
2. LED blinks – remote control button was activated (timer is on in the alarm mode).

Choosing operation mode.

1. Switch the receiver off the power supply.
2. Set the jumpers to desired position.
3. If needed program the receiver with your remote control.
4. Switch the power supply on.
5. Close the cover of the receiver.
6. Switch on the receiver.

Receiver connection.

Insert a cable into an inlet and connect wires in respect to the following requirements:

TERMINAL: 1 - is designated (–)

TERMINAL: 2 - is designated (+)

Plus is connected to (+) of the power supply for 12 to 16 VDC.

TERMINALS: 3, 4, 5, 6, 7, 8 – are designated (RELAY 1) and (RELAY 2).

1	2	3	4	5	6	7	8
⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘

| - | 12V | + | NC | C | NO | NC | C | NO |

RELAY 1   RELAY 2

Mounting the working modes.

In the following tables you will find modes for programming and operation of the receiver.
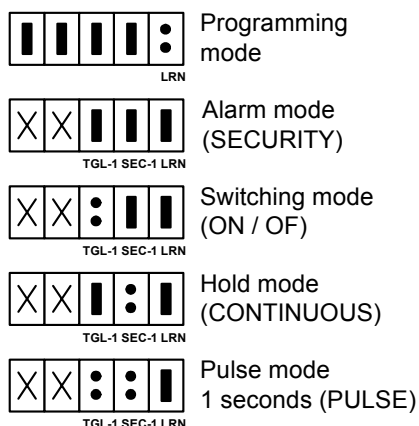
Jumper (LRN) - programming of the two channels.

Jumpers (SEC-1) and (TGL-1) - for the first channel.

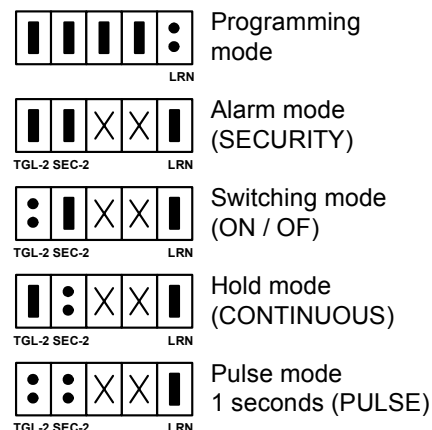Jumpers (SEC-2) and (TGL-2) - for the second channel.

Attention!

Manufacturer guaranties the correct operation of the device (and the LED) if the operation modes were changed when the power supply was switched off.

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Programming mode
LRN

Alarm mode (SECURITY)
TGL-1 SEC-1 LRN

Switching mode (ON / OF)
TGL-1 SEC-1 LRN

Hold mode (CONTINUOUS)
TGL-1 SEC-1 LRN

Pulse mode 1 seconds (PULSE)
TGL-1 SEC-1 LRN

«1-Channel»

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Programming mode
LRN

Alarm mode (SECURITY)
TGL-2 SEC-2 LRN

Switching mode (ON / OF)
TGL-2 SEC-2 LRN

Hold mode (CONTINUOUS)
TGL-2 SEC-2 LRN

Pulse mode 1 seconds (PULSE)
TGL-2 SEC-2 LRN

«2-Channel»

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Clearing memory.

1. Disconnect the receiver from the power supply.

2. Remove the jumper "LRN".

3. Connect the power supply – LED will begin to flash seldom within 10 seconds, then the LED operation frequency will change.
All the codes, earlier written down in the memory, will be erased.

4. Install the jumper "LRN" - LED operation clock frequency will change again.
It is now possible to begin new programming of panel codes.

(See the receiver programming).

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Receiver programming.

1. Remove the jumper "LRN" - LED will switch off.

2. Press any of the panel buttons - LED on the receiver will flash once to indicate that input of a code was successful.

3. Establish the crosspiece "LRN" - the first code is entered.

4. To check the entered code press tamper button and in 4 seconds press one of the panel buttons.

5. To further program the receiver repeat the following operations (Article 1–4).

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Attention!

Programming in the "Alarm system" mode involves immediate activation of the event memory for 15 minutes. In 15 minutes the memory will be automatically erased.

LED indications during programming.

1. LED blinking – there is no code stored in the memory of the receiver.

2. LED is off – receiver is a waiting programming.

3. LED flashed once – code of the remote control is read and stored.

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Technical specification:

Power supply:……………..12-16VDC

Consumption current:

In a stand-by mode:...46мА from 12V
In an alarm mode:…..28мА from 12V

Zone of an "alarm" indication sure detection:..200-250m (In open space)

Operating frequency:...…433,92 MHz

Receiver code memory:...……….165

Alarm period:…..……………….3 sec

Receiver available
time for work:…………………0,5 sec

Protection against
intrusion:………………tamper button

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Relay switching
parameters:……….…....= 30 V, 1.0 A
……………………….…. = 60 V, 0.3 A
…………………….……~ 125 V, 0.5 A

Operating
temperature range:…..– 20ºC + 50ºC

Storage
temperature range:…..– 40ºC + 80ºC

Humidity:…………………up to 90 %

Dimensions:.80mm x 40mm x 20mm

Weight:………………………95 grams.

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Warranty.

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