ACS146R

PROFESSIONAL WIRELESS FOUR-CHANNEL CODE HOPPING REMOTE CONTROL SET. INSTRUCTION MANUAL AND TECHNICAL SPECIFICATIONS.

INTRODUCTION. The wireless four-channel multifunctional receiver **ACS146R**, operating in conjunction with two hand-held push-button transmitters, provides the remote control of any electronic equipment: ELECTRICAL GATES, SLIDING DOORS, ELECTROMAGNETIC LOCKS, AUTOMATIC BARRIERS, ELECTRICAL CURTAINS, LIGHTING FIXTURES, etc.
The remote control set may be used as a PANIC BUTTON in security systems for creating any type of alarm.

CODE HOPPING TECHNOLOGY.
The wireless remote control set **ACS146R** uses a highly secure code hopping algorithm.
The combinations of different codes transmitted by remote controls prevent radio scanning and unauthorized access.

ACS146R FEATURES.

- **FOUR INDEPENDENT CHANNELS.**
- **FIVE OPERATING MODES OF EACH RECEIVER CHANNEL:**

1. PULSE MODE - 1SECOND. **2.** SWITCH ON PERIOD MODE (1 – 300 sec). **3.** SWITCHING MODE (ON/OFF).
4. HOLD MODE (CONTINUOUS). **5.** PANIC BUTTON MODE (SECURITY).

- Power input: AC/DC 24V
- Receiving range in open space - up to 500 meters
- Code hopping (rolling code) technology
- Maximum quantity of remote controls learning the receiver – 330 pieces
- Programming the ON/OFF period for the desired time from 1 to 300 sec
- Unauthorized access protection (in “Panic Button” mode)
- Last event memory: 30min (in “Panic Button” mode)
- The alarm comes on when the electric power supply is disconnected (in “Panic Button” mode)

SETTING THE RECEIVER OPERATING MODES.

1. «PULSE» MODE - 1 SECOND (default setting).

FIRST CHANNEL	SECOND CHANNEL	THIRD CHANNEL	FOURTH CHANNEL
“SEC-1” is installed. “TGL-1” is installed.	“SEC-2” is installed. “TGL-2” is installed.	“SEC-3” is installed “TGL-3” is installed.	“SEC-4” is installed. “TGL-4” is installed.

Pressing the remote control button (A) activates the relay of the first receiver channel for 1 second.
Pressing the remote control button (B) activates the relay of the second receiver channel for 1 second.
Pressing the remote control button (C) activates the relay of the third receiver channel for 1 second.
Pressing the remote control button (D) activates the relay of the forth receiver channel for 1 second.

2. «SWITCH ON PERIOD» MODE (1-300 SECOND).
PROGRAMMING "SWITCH ON PERIOD" MODE.

FIRST CHANNEL	SECOND CHANNEL	THIRD CHANNEL	FOURTH CHANNEL
“SEC-1” is installed. “TGL-1” is installed.	“SEC-2” is installed. “TGL-2” is installed.	“SEC-3” is installed “TGL-3” is installed.	“SEC-4” is installed. “TGL-4” is installed.

A. Press and hold the "Tact switch” button (SW2) . The LED will turn OFF and 5 seconds after will turn ON. Release (SW2) button.
B. Press and release remote control button (A) – the relay of the first receiver channel is activated. The LED starts to blink indicating that the receiver has begun to memorize the required time period from 1 to 300 sec.
C. Press and release the same remote control button to finish programming the ON/OFF period for the user-definable time from 1-300 sec. The LED will turn ON - “SWITCH ON PERIOD” MODE is programmed.
➢ To change the ON/OFF period in “SWITCH ON PERIOD” MODE, perform steps A to C above.
➢ To program “SWITCH ON PERIOD” MODE for second, third or fourth receiver channel repeat steps A to C using remote control buttons (B), (C) or (D).

RESET TO FACTORY DEFAULT SETTING («PULSE MODE» - 1 SECOND).
Jumpers "SEC-1" "TGL-1", "SEC-2" "TGL-2", "SEC-3" "TGL-3", "SEC-4" "TGL-4' – are installed.
A. Press and hold the "Tact switch” button (SW2). The LED will turn OFF and 5 seconds after will turn ON. Release (SW2) button.
B. Press and hold the "Tact switch” button (SW1) during 5 seconds – LED starts to blink and then will be continuously lit.
C. Release (SW1) button – the operating mode of the first receiver channel has been reset to its original factory default.
➢ To reset the operating mode of second, third or fourth receiver channel to default setting perform steps A to C above, but press and hold the "Tact switch” button (SW1) during 10 seconds for second receiver channel, 20 seconds for third receiver channel or 30 seconds for forth receiver channel in Step B.

3. «SWITCHING MODE» (ON/OFF).

FIRST CHANNEL	SECOND CHANNEL	THIRD CHANNEL	FOURTH CHANNEL
“SEC-1” is installed. “TGL-1” is removed.	“SEC-2” is installed. “TGL-2” is removed.	“SEC-3” is installed “TGL-3” is removed.	“SEC-4” is installed. “TGL-4” is removed.

Each pressing the remote control button corresponds to one of the relay positions (ON/OFF).

4. «HOLD MODE (CONTINUOUS)».

FIRST CHANNEL	SECOND CHANNEL	THIRD CHANNEL	FOURTH CHANNEL
“SEC-1” is removed. “TGL-1” is installed.	“SEC-2” is removed. “TGL-2” is installed.	“SEC-3” is removed. “TGL-3” is installed.	“SEC-4” is removed. “TGL-4” is installed.

The receiver relay is activated during the continuous pressing the remote control button (maximum 25 second).

5. «PANIC BUTTON MODE».

FIRST CHANNEL	SECOND CHANNEL	THIRD CHANNEL	FOURTH CHANNEL
"SEC-1" is removed. "TGL-1" is removed.	"SEC-2" is removed. "TGL-2" is removed.	"SEC-3" is removed. "TGL-3" is removed.	"SEC-4" is removed. "TGL-4" is removed.

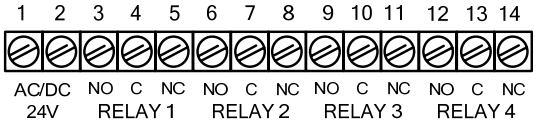
This mode is used in security systems. The alarm occurs by pressing the remote control button, by unauthorized receiver opening, or when the electric power supply is disconnected. Last event memory - 30 minutes.
NOTE! In the «PANIC BUTTON MODE» the receiver does not operate if the cover is removed.

RECEIVER CONNECTION.

Run the cable through the cable entry hole and connect the wires in accordance to the following instructions:
Terminals 1, 2 (AC/DC 24V ± 10%) – for power supply.
Terminals 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 – relay outputs for four receiver channels (RELAY1), (RELAY2), (RELAY3), (RELAY4).

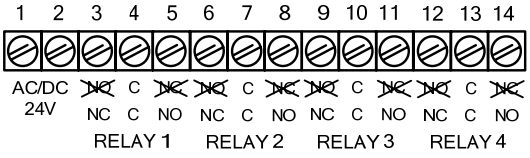
CONNECTING THE RECEIVER IN THE FOLLOWING MODES:

«PULSE MODE»
«SWITCH ON PERIOD MODE»
«SWITCHING MODE» (ON/OFF)
«HOLD MODE» (CONTINUOUS)



CONNECTING THE RECEIVER IN

«PANIC BUTTON MODE»



MEMORY CLEARING.

1. Disconnect power. 2. Press and hold theTact switch" button (SW2). 3. Restore power while still holding the "Tact switch" button (SW2) for a few seconds. LED starts to blink, and the moment LED turns OFF, all pre-programmed codes will be erased. 4. Release the button (SW2). 5. Start new learning of the receiver.

LEARNING OF THE RECEIVER.

1. Press the "Tact switch" button (SW2) – LED will be OFF.
2. Press any of the remote control buttons – LED will flash indicating successful code memorizing.
If necessary, learn the receiver by additional remote controls.
3. Press the "Tact switch" button (SW2) – LED will be ON – the receiver is learned.

➢ Maximum quantity of remote controls learning the receiver– 330 pieces.

RECEIVING RANGE.

The operating range of the hand-held remote controls depends on the mounting location of the receiver. The various obstructions, the environmental factors, the radio-frequency and electromagnetic sources might influence the emission of radio-signal and as a result, might shorten the receiving range. For optimal radio-signal reception: mount the receiver at least 1,5 meter above the ground, as far as possible from any radio frequency and electromagnetic sources.

TECHNICAL SPECIFICATIONS.

Power input:……AC/DC 24V ± 10%;
Current consumption:
Stand-by mode:……19mA/24V;
Active mode:……82mA/24V;
Receiving range in open space:……up to 500m;
Security code: .....rolling code;
Operating frequency:……..433.92MHz ±50kHz;
Radiated power:…….....≤10mW;
Memory capacity:……..330 codes;

Alarm period in panic button mode:……..3sec;
Warm up period:……0.5sec;
Dry contact relay:…….DC30V/1.0A; DC60V/0.3A; AC125V/0.5A;
Opening protection:……..tamper switch;
Last event memory in panic button mode:.....30 min;
Operating temperature range:……..-20ºC +50ºC;
Storage temperature range:……..-40ºC +80ºC;
Dimensions:……..85mm x 55mm x 20mm;
Weight:……..140gr.
