



RT4-5se object device.

Installation manual.

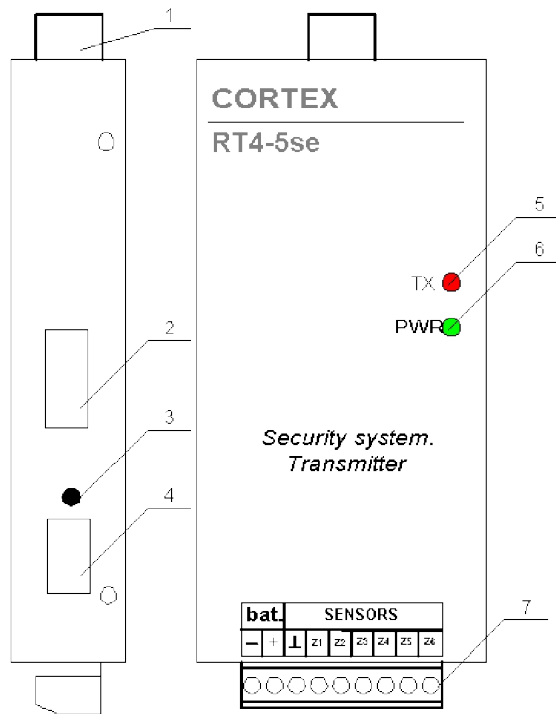
Year 2003.

Main features.

RT4-5se is made for gathering information about secured object, it's handling and transmitting to alarm receiver. Also, **RT4-5se** realizes external supply control, and when it is lower critical limit or restores in normal condition, sends this information to the alarm receiver. If the outer input condition had not been changing for a long time, than a test message is sent to the alarm receiver.

RT4-5se object device is made in closed metal frame. Appearance and control and indication units are shown on the [Pic.1](#).

1. Antenna socket.
2. Programming slot.
3. Registration button.
4. Terminal board for work modes setting.
5. Transfer mode indicator.
6. Power supply and diagnostics indicator.
7. Terminal board for power and additional device wiring.



Pic.1

General performance attributes

Frequency range	139 -174MHz
Radiation class	8K0F1D
Carrier power, at most	5W
Frequency deviation, at most	2,5kHz
Carrier frequency instability, at most	10ppm
Off-frequency emission power, at most	0.25 μ W
Transmitting time	128ms
Number of transmissions for one event	3*
Test transmission number	3*
Test transmission period, hours	10*
Power supply	11-14V
Input current:	
In asleep mode, at most	15mA
In transmitting mode, at most	1.7A
Dimensions, mm	160x70x25
Category temperature range	-10 - +50°C

*** - Programmable parameter, default value specified.**

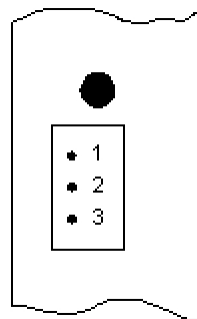
Transmitter programming and mode setting.

Control panel programming is made with the help of programmer through personal computer's parallel port.

RT4-5se object device allows to program:

- Object device physical address
- Address of the relay, on witch transmitter is registered
- Number of transmission sessions for every event
- Number of transmission sessions for every test
- Test period

RT4-5se object device has two modes of operation.



Pic.2

1. Parallel input mode.

In this mode object device works like six-input translator i.e. transmits any change in inputs to the alarm receiver. All object device inputs can work with signals like «Short to ground» (by default) or «short to +12V». To switch object device inputs into «short to +12V» mode simply mount jumper between contacts 2 and 3 [\(Pic.2\)](#).

2. Serial interface mode.

To turn his mode on simply mount jumper between contacts 1 and 2 (Pic.2).

Object device power supply must be turned off!

When in this mode, object device uses synchronized serial interface to receive information (Z1 input – data, Z2 – time units) and can transmit to alarm receiver up to 8 bytes of information. This allows receiving a detailed information (alarm types, users lds, ect.) from control panels, using basic additional devices, and transmit it to alarm receiver. Functions of the other four inputs are kept.

Object device registration on the relay.

This mode doesn't used in multi-access nets!

RT4-5se object device can work in relaying system with transmitter registration on relays. In this system relays automatically trace transmission of test signals from registered object devices without transmitting them to alarm receiver. This allows to shorten test time without lowering system capacity.

To register object device you need:

1. to program relay address **00** (condition by default),
2. sending test signals from object device, determine, using alarm receiver data, through witch relay signal is transmitted with the highest level,
3. program this relay's address into the object device,
4. press «Register» button,
5. receive a alarm receiver confirmation, about object registration on the chosen relay,
6. repeat all actions from p.3 if needed.

After object device registration, it's test messages won't be transmitted by any relay. If relay doesn't receive test messages from object device during proper time (by default 36min.), it forms an alarm message and periodically (by default 36min.) sends it to alarm receiver until transmission is recovered. If transmission isn't recovered during a long time (by default 24h.), object is erases from

the registration and message is sent to alarm receiver. **After erasing from registration object control is not made!**

To restore registration – repeat all the procedure again.

Diagnostic.

When using **PWR** indicator ([Pic.1](#)) it is possible to locate following troubles:

- **Object device power supply is lower than 11V** – indicator blinks **once a second** – Change battery or power source.
- **Fixed memory failure or wrong programming** – indicator blinks **4 times a second** – program your device again.

Mounting recommendations.

It is recommended to realize device power supply right through battery, that is used as a spare power source, or from **VSCS-1,5** supply «+12V» output.

Before object device power supply, it is necessary to wire antenna. Antenna can be wired to the antenna joint, or by coaxial cable.

It is recommended to choose device-mounting place according to the best signal reception by the alarm receiver. Signal reception level is determined by the alarm receiver indication level (see alarm receiver description). When mounting object device, it is important to keep in mind the following aspects:

- Wires connecting object device and battery should be the minimum length
- Wires, that lead to the object device terminal board shouldn't lie near antenna, and never should be laid lengthwise it

When using “dipole” type antenna, cable connected to it should be laid athwart it for at least 1m lengths