

S2000-IK Rev.04

Addressable Curtain PIR Motion Detector

INSTRUCTION MANUAL



GENERAL

S2000-IK Revision 04 Addressable Curtain Passive Infrared (PIR) Motion Detector (hereinafter referred to as the detector) is designed to be used indoors. It detects intrusion into protected areas and sends an alarm message to the connected S2000-KDL controller via the two-wire multiplex addressable polling loop.

The S2000-IK rev.04 has a two-dimensional coverage pattern ("vertical curtain").

The detector provides increased immunity against lighting and radio frequency interference.

KEY FEATURES

- ✓ Dual-element pyro-electric infrared sensor
- ✓ High-density coverage offering high probability of detecting an intruder
- ✓ Protected against insects entering to the pyro-electric infrared sensors
- ✓ Arranging sabotage-resistant zones just beneath the detector prevents unauthorized access to the detector.
- ✓ Digital signal processing
- ✓ Powered via the multiplex addressable polling loop of the S2000-KDL
- ✓ Supports DPLS_v2.xx protocol

SPECIFICATIONS

Detection Range	10 m
Coverage Pattern	Curtain (two-dimensional)
Input Voltage (from a S2000-KDL)	8 ÷ 10 VDC
Current Consumption (via the loop of the S2000-KDL)	0.5 mA max when indication is off
Horizontal Angle of Sight	6°
Operating Temperatures	–30 to +50°C
Humidity	95% at 25°C, non-condensing
Overall Dimensions (H x W x D)	105 mm × 75 mm × 56 mm max
Weight	0.1 kg max
Mounting Height	2.3 meters

MOUNTING LOCATION CONSIDERATIONS

The detector is intended to be used indoors. Considering a location to mount the detector, please take into account that the detection zone must not be obscured by any non-transparent objects such as curtains, houseplants, cabinets, room dividers, etc. as well as by glass or mesh partitions.

Do not locate the detector where it can be exposed to false alarm sources such as windows, air conditioners, heaters, radiators, etc.

Wires of the multiplex addressable polling loop should be located away from high-voltage electric cables.

The detector allows wall or corner mounting at a height of 2.3 m above the floor. This provides the detection range at least 10 meters. The detection pattern is shown in Figure 1.

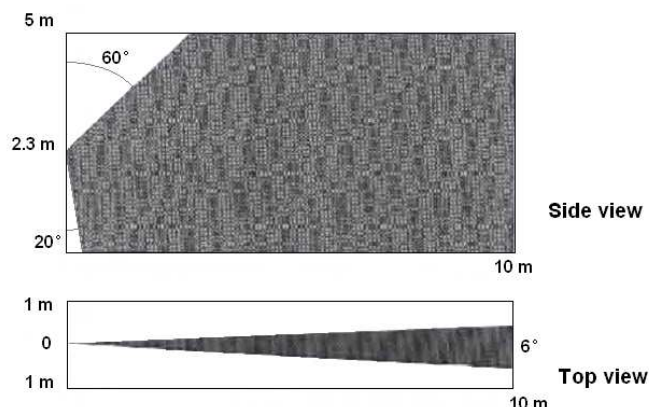


Figure 1: S2000-IK Rev.04 Detection Pattern

INSTALLING THE DETECTOR

1. Using a screwdriver remove the cover screw at the bottom of the detector (see Figure 2) and separate the detector cover.
2. Using a screwdriver remove the PCB screw (see Figure 2) and lift the PCB out of the detector base.
3. Drill out the required mount and wiring holes in the base (see Figure 2).
4. Having selected the mounting location, mark the positions of the fixing holes taking into account mounting holes in the base, and drill holes at the marked places
5. Slide the wire into the wire holes leaving some centimeters for connecting wires to the terminal blocks
6. Finally, replace the PCB and tighten the PCB screw

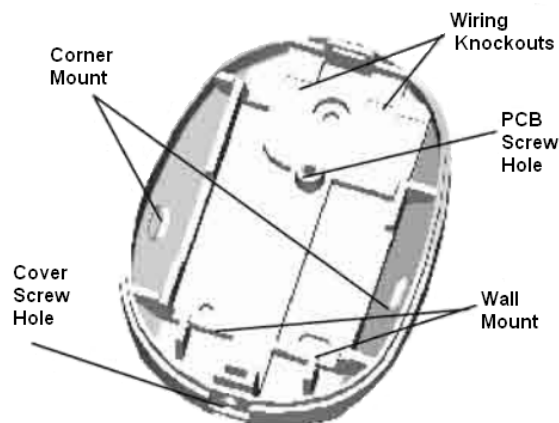
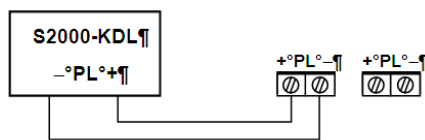


Figure 2: Detector Base

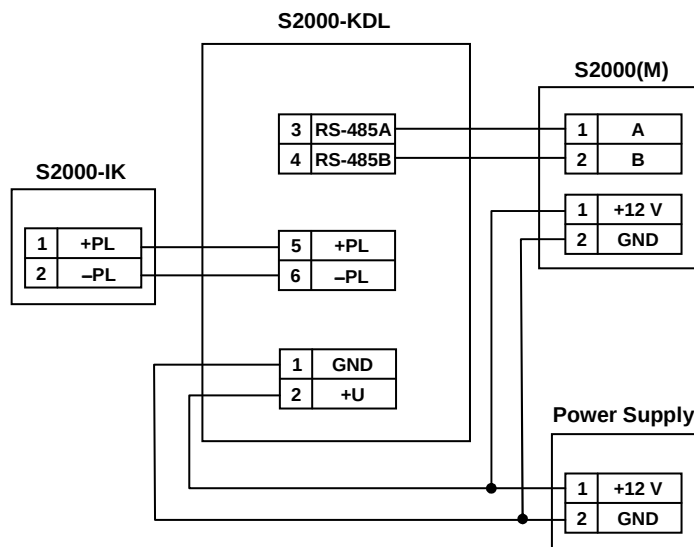
WIRING

Figure 3a shows the way to connect detector's PL contacts which are situated at the top of its PCB to the relevant contacts of the S2000-KDL.

Figure 3b shows the wiring diagram for connecting the detector to the multiplex addressable loop of the S2000-KDL controller which is in turns connected to the network controller and the power supply.



a) Connection Terminals



b) Detector's Wiring Diagram

Figure 3 Connecting the Detector

PROGRAMMING

The S2000-IK rev.04 to operate properly within two-wire addressable polling loop of the S2000-KDL controller, it must be assigned to a unique number 1 to 127 within the loop – the address which is stored in the S2000-IK rev.04 non-volatile memory (EEPROM). This address provides identifying the detector by the S2000-KDL controller. Moreover, the monitoring strategy must be defined which will be used by the S2000-KDL controller while processing signals received from the S2000-IK rev.04.

Programming the S2000-IK Rev.04 Address within the S2000-KDL Addressable Loop

An S2000-IK rev.04 is supplied with the default address of 127. This address value can be changed using either S2000(M) console tools or PC tools such as UProg Configuration Tool.

In order to program the unique S2000-IK rev.04 loop address, connect it to a S2000-KDL controller which is in turns connected to a network controller (an S2000(M) console or PC under UProg software). Then send one of the following commands to the S2000-KDL controller (for getting more information see the relevant User's Manual):

Change the Device Address

Use the *Change Device Address* command specifying the old detector address and the new detector address as the parameters (see more information in the referred Manuals). The network controller will display the messages about disconnecting the device with the old address and then detecting the device with newly programmed address.

Program the Device Address

If the device address is unknown or two devices have the same address then use the *Program Device Address* command specifying a required address as the parameter. Then remove the detector cover and ensure the LED is flashing indicating the programming mode (frequent short flashes every 2 s). Next, press the tamper switch in LLLS pattern, where L stands for long pressings (longer than 0.5 s) while S stands for short pressings (shorter than 0.5 s), pauses between pressings not exceeding 1s each. If the address has changed successfully, the LED will be lit steady and a message about detecting the device with the newly assigned address shall be displayed by a network controller (S2000(M) or UProg Configuration Tool). If you failed to assign the address, wait for 2 s and repeat programming.

Programming the S2000-KDL to Operate the S2000-IK Rev.04

To handle signals from an S2000-IK rev.04 correctly, the S2000-KDL controller which the detector is connected to must be programmed with the *Zone Type* parameter for this S2000-IK rev.04 being set to value 4 (*Intrusion*), or 5 (*Intrusion with Tamper Check*), or 7 (*Entrance*), or 11 (*Panic*), or 6 (*Auxiliary*). To program the S2000-KDL, connect it to a PC under UProg Configuration Tool and follow the relevant programming instructions in accordance with the S2000-KDL User's Manual.

WALK TEST

Connect the detector to the multiplex addressable polling loop as shown in Figure 3b. Then power on the controller and wait for about two minutes. Next, walk through the detection zone. The detector shall issue an alarm after your three or four steps, with its LED being flashing. Wait until the LED finishes flashing, and then continue crossing the detection zone. The detector should issue an alarm. If nobody is moving within the detection zone, no alarms shall be issued.

WARNING



To ensure proper operation, walk test the S2000-IK rev.04 annually as described above.

ENABLING/DISABLING LED INDICATION

LED indication can be controlled either *via a PC* or by means of the *detector tamper switch*.

If LED indication is to be controlled via a PC, by the connected S2000-KDL, the S2000-KDL should be specifically configured from the PC using the UProg Configuration Tool. The parameter *Device Indication Control* of the S2000-KDL polling loop input zone which is assigned to the S2000-IK rev.04 should be set to a proper value. By default, Device Indication Control is set to the value of 1, providing LED indication in accordance with the detector's own pre-determined algorithm. To disable indication, set this parameter to zero.

If LED indication is to be controlled by the tamper switch, the algorithm is as follows. On detector's switching on the LED indication is enabled (unless the input S2000-KDL zone assigned to the detector is configured with disabled indication). To disable indication, press the tamper switch in LLSL pattern; otherwise, to enable indication, press the tamper switch in LLSS pattern, where L stands for a long pressing (longer than 0.5 s) while S stands for a short pressing (shorter than 0.5 s). Pauses between pressings must not exceed 1 s each.



ZAO NVP Bolid, 4 Pionerskaya Str., Korolev 141070, Moscow Region, Russia
Phone/fax: +7 495 775-7155
Email: info@bolid.ru, overseas@bolid.com
www.bolid.com

BOLID ONE YEAR LIMITED WARRANTY

Bolid Company and its divisions and subsidiaries («Seller»), 4 Pionerskaya Str., Korolev 141070, Moscow Region, Russia warrants its security equipment (the «product») to be free from defects in materials and workmanship for one year from date of original purchase, under normal use and service. Seller's obligation is limited to repairing or replacing, at its option, free of charge for parts or labor, any product proven to be defective in materials or workmanship under normal use and service. Seller is not responsible for results where the product is used improperly, where it is used for any application it is not intended for, used under unacceptable environmental conditions and mishandled or stored under improperly. Seller shall have no obligation under this warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than the Seller. In case of defect, contact the security professional who installed and maintains your security equipment or the Seller for product repair.

This one year Limited Warranty is in lieu of all other express warranties, obligations or liabilities. There are no express warranties, which extend beyond the face hereof. Any implied warranties, obligations or liabilities made by seller in connection with this product, including any implied warranty of merchantability, or fitness for a particular purpose or otherwise, are limited in duration to a period of one year from the date of original purchase. Any action for breach of any warranty, including but not limited to any implied warranty of merchantability, must be brought within 12 months from date of original purchase. In no case shall seller be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, express or implied, or upon any other basis of liability whatsoever, even if the loss or damage is caused by the seller's own negligence or fault. Some countries do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Seller does not represent that the product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery, fire or other events occurring without providing an alarm, but it is not insurance or guarantee that such will not occur or that there will be no personal injury or property loss as a result. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. HOWEVER, IF SELLER IS HELD LIABLE, WHETHER DIRECTLY OR INDIRECTLY, FOR ANY LOSS OR DAMAGE ARISING UNDER THIS LIMITED WARRANTY OR OTHERWISE, REGARDLESS OF CAUSE OR ORIGIN, SELLER'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT, WHICH SHALL BE THE COMPLETE AND EXCLUSIVE REMEDY AGAINST SELLER. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country. No increase or alteration, written or verbal, to this warranty is authorized.