S2000-AR1

Addressable Single-Input Module

REVISION 02

INSTRUCTION MANUAL

GENERAL

The S2000-AR1 Addressable Single-Input Module (hereinafter referred to as the S2000-AR1 or the module) is designed to connect a conventional fire or intrusion detector (with normally-open or normally-closed contacts) into the multiplex addressable Polling Loop (PL) of an S2000-KDL controller. Being housed within the interfaced detector's enclosure, the S2000-AR1 receives control signals from the detector's alarm and tamper outputs returning specific statuses to the S2000-KDL.

The S2000-AR1 module is supplied with power and communicates data with the S2000-KDL over the polling loop.

The S2000-AR1 is designed for round-the-clock operating.

SPECIFICATIONS

Input Voltage (over the polling loop)	8 ÷ 12 VDC
Current Consumption (over the polling loop)	0.6 mA max
Pre-Operation Time	15 s max
Operating Temperatures	−30 to +50℃
Humidity	93% at 40℃, non-condensing
Overall Dimensions	20 mm × 15 mm × 6 mm max
Weight	0.01 kg max
Average Lifetime	at least 8 years

STANDARD DELIVERY

Find the following unpacking the carton:

- ➢ 10 S2000-AR1 Modules
- ➢ This Instruction Manual
- ➢ 20 ECT UY Connectors

STANDARD WIRING DIAGRAM
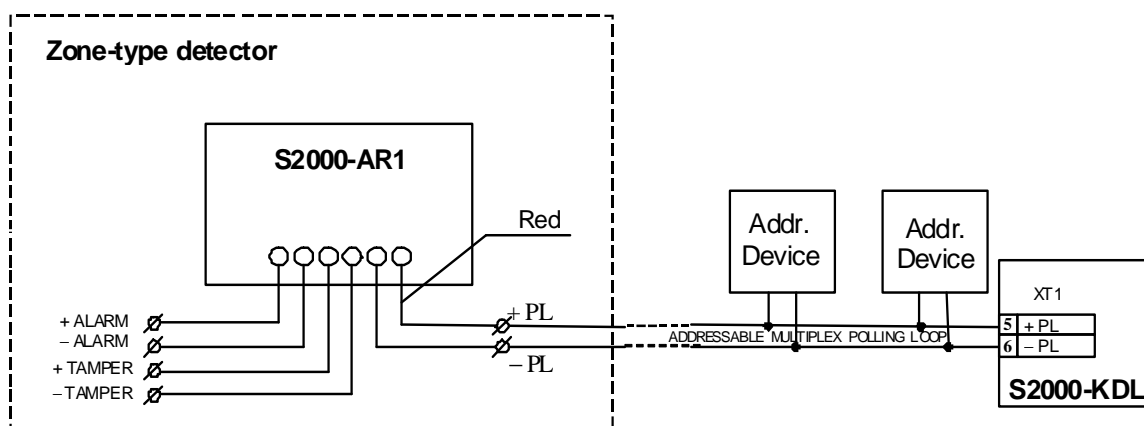
The above diagram shows wiring the S2000-AR1 to the polling loop of the S2000-KDL as well as to the ALARM and TAMPER terminals of the interfaced conventional detector.

MOUNTING

The S2000-AR1 is housed within the enclosure of the interfaced zone-type detector. ALARM terminals of the S2000-AR1 are coupled with the alarm output of the interfaced detector which returns alarm conditions by opening its contacts. The TAMPER terminals of the S2000-AR1, if used, must be connected to the detector's tamper output, also opening its contacts upon tamper alarm conditions.

To connect the S2000-AR1 to the polling loop of the S2000-KDL, split +PL and −PL contacts of the flat cable and couple them with the relevant wires of the polling loop using ECT UY connectors provided. *Please couple the red wire of the flat cable with the positive polling loop wire*. Using pliers, crimp the coupled conductors to provide reliable contacts.

PROGRAMMING

In order the S2000-AR1 operates properly within the multiplex addressable polling loop of the S2000-KDL controller, the module must be assigned to a unique number from 1 to 127 within the polling loop. This number, or the loop address, is stored in the S2000-AR1 non-volatile memory. The default factory value of the module address is 127.

Moreover, a monitoring strategy must be defined which will be used by the S2000-KDL controller while processing signals received from the S2000-AR1.

Programming the S2000-AR1 Address within the S2000-KDL Polling Loop

An S2000-AR1 module is supplied with the default loop address of 127. This address value can be changed using either S2000(M) console tools or the UProg Configuration Tool.

In order to program the unique S2000-AR1 loop address, connect the module to a S2000-KDL controller which is in turns connected to a network controller (a 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 the Device Address* command specifying the old module address and the new module address as the parameters (see more information in the referred Manuals). The network controller will display 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 the Device Address* command specifying a required address as the parameter. Then open the detector enclosure and disconnect module's ALARM and TAMPER terminals from the detector outputs. Next, couple the positive module terminals +ALARM and +TAMPER. All the procedures should not last more than 5 seconds. The message about detecting the device with the newly assigned address shall be displayed by a network controller (S2000(M) or UProg Configuration Tool). Finally, uncouple module terminals +ALARM and +TAMPER and attach all the ALARM and TAMPER module terminals to the relevant outputs of the detector housing the S2000-AR1.

Programming the S2000-KDL to Operate the S2000-AR1

To handle signals from a S2000-AR1 correctly, the S2000-KDL controller the module is connected to must be programmed with the proper *Zone Type* parameters for this S2000-AR1.

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.

The zone of the S2000-KDL the S2000-AR1 is connected to can be programmed with one of the zone types: 3 (*Heat*), 4 (*Intrusion*), 5 (*Intrusion with Tamper Monitoring*), 6 (*Auxiliary*), 7 (*Entrance*), or 11 (*Panic*). Being programmed with the Zone Type 3 (Heat), the S2000-AR1 can generate only either Norm or Fire status.

S2000-AR1 ROUTINE TESTING

To test the S2000-AR1 module, arm its monitored circuit with the connected detector by means of a network controller (either S2000/S2000M console or Orion PC). To verify transferring detector's tamper alarm please ensure the Zone Type is set to 5 for this S2000-AR1 in the S2000-KDL configuration.

Then simulate the detector alarm response by uncoupling the ALARM terminals of the S2000-AR1. Ensure the network controller indicates a Fire Alarm or Intrusion Alarm for the monitored zone with the relevant loop address. Recover normal conditions and reset the alarm by means of the network controller.

Next, simulate the detector tampering response by uncoupling the TAMPER terminals of the S2000-AR1. Ensure the network controller indicates a Tamper Alarm for the relevant monitored zone. Recover normal conditions and reset the alarm by means of the network controller.

If the network controller has displayed no intrusion / fire / tamper alarms said above then the module is defective and must be replaced.

BOLID ONE YEAR LIMITED WARRANTY

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