

The microprocessor-based, fully digital AQUA series detectors feature high sensitivity and interference resistance. The AQUA detector employs a dual pyro electric element, and the AQUA Pro - a quad element.

CONTACTS:

- NC** - alarm relay (NC)
- TMP** - tamper contact (NC)
- COM** - ground (0V)
- 12V** - supply input (9-16V DC)

Three pairs of pins are used for setting the detector working parameters (see Table).

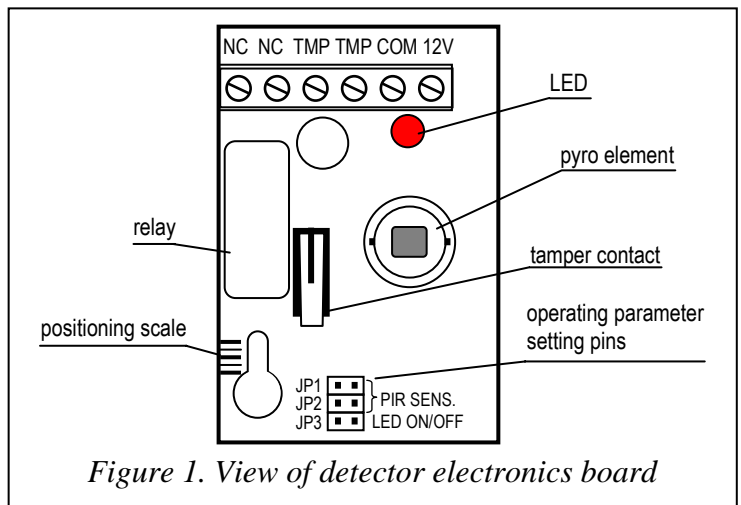


Figure 1. View of detector electronics board

	JP1	JP2	JP3
Low sensitivity	□ □	□ □	
Medium sensitivity	□ □	■ ■	
	■ ■	□ □	
High sensitivity	■ ■	■ ■	
LED indicator ON			■ ■
LED indicator OFF			□ □

□ □ - pins open ■ ■ - pins shorted

The LED lights red for approx. 2s when the detector is actuated, which enables the installer to check the detector for correct functioning and to approximately determine the protected area.

The detector features a prealarm function. The prealarm does not actuate the relay and is indicated by a short flash of the LED, lasting approx. 120ms. It is activated when the

ambient disturbances recorded by the detector do not meet the alarm criteria. The prealarm sensitivity is not affected by the detector sensitivity, which is set with jumpers.

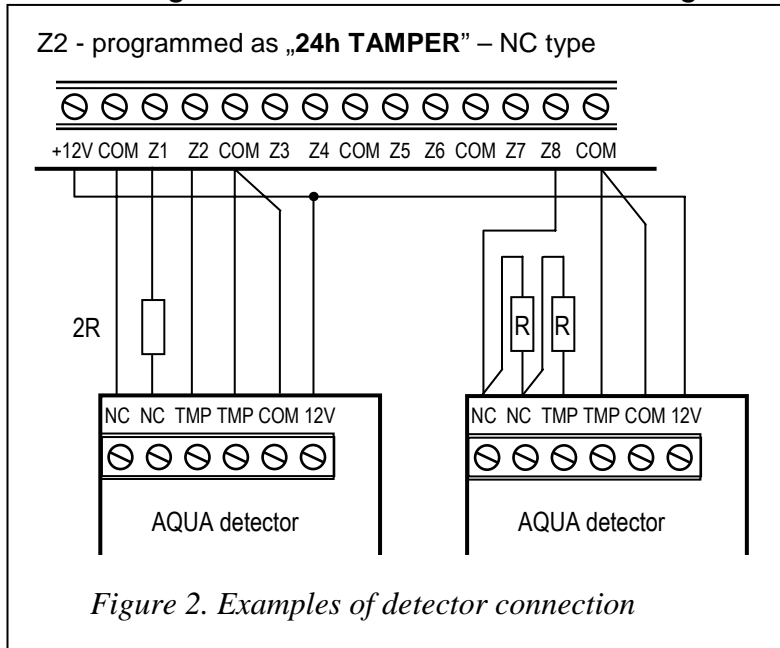
For 30 seconds after the power is turned on, the detector remains in a starting state, which is signaled by rapid LED blinking. Only then the detector enters its operational readiness state.

The detector monitors the supply voltage. If the voltage drops below 9V ($\pm 5\%$) for more than 2 seconds, the detector will signalize a violation state until a voltage of minimum 9V ($\pm 5\%$) is restored.

INSTALLATION

The detector is designed for indoor installation. It can be mounted on the wall, either directly or on the included holder. Prior to installation of the detector housing, remove the electronics board and make adequate openings for screws and cable in the rear panel of the housing. **It is advisable that you exercise particular care to prevent the pyro element from getting dirty or damaged during installation.**

The scale provided on the detector board (see Fig.1) is intended for properly setting the pyro element against the lens installed in the housing. If the detector is to be mounted at a height of 2.1 m, set the board so that the midline is aligned with the mark provided on the housing next to the scale. Such a setting will ensure that the manufacturer specified range is obtained. In case the detector is to be installed at another height, it is necessary to carry out regulation of the pyro element setting by moving the board up (when the detector hangs higher than 2.1m) or down (when the detector hangs lower than 2.1m) in relation to the mid-position.



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Figure 2 shows typical examples of connecting the detectors in EOL (End Of Line resistor) configuration and 2EOL (Double End Of Line resistor) configuration. Resistors should be mounted inside the detector housing.

LENSES

In the detector is mounted the extra wide angle lens, however, it is possible to replace it by another lens with different characteristics (range, number of beams, angle of view). Lenses are available with the following characteristics:

It.	Lens type	Range	Angle of view
1	extra wide angle	15m	141.2°
2	long range with access zone monitoring	30m	main beam – 3m wide (at the end of range)
3	vertical barrier	22.5m	2.2m wide (at the end of range)

NOTE: *The detector operating range should be selected to match the size of space where the detector will be installed. The size of the space along the main direction of detector positioning is not to be less than 1/3 the nominal range of the detector. Improper selection of the lens may cause excessive sensitivity and trip false alarms.*

TECHNICAL DATA

Nominal supply voltage.....	12V DC
Mean power consumption (±10%).....	9.5mA
Violation signaling time	2s
Operating temperature range	-10...+50°C
Detectable motion speed	up to 3 m/s
Dimensions	63x96x49mm
Recommended installation height.....	2.1m

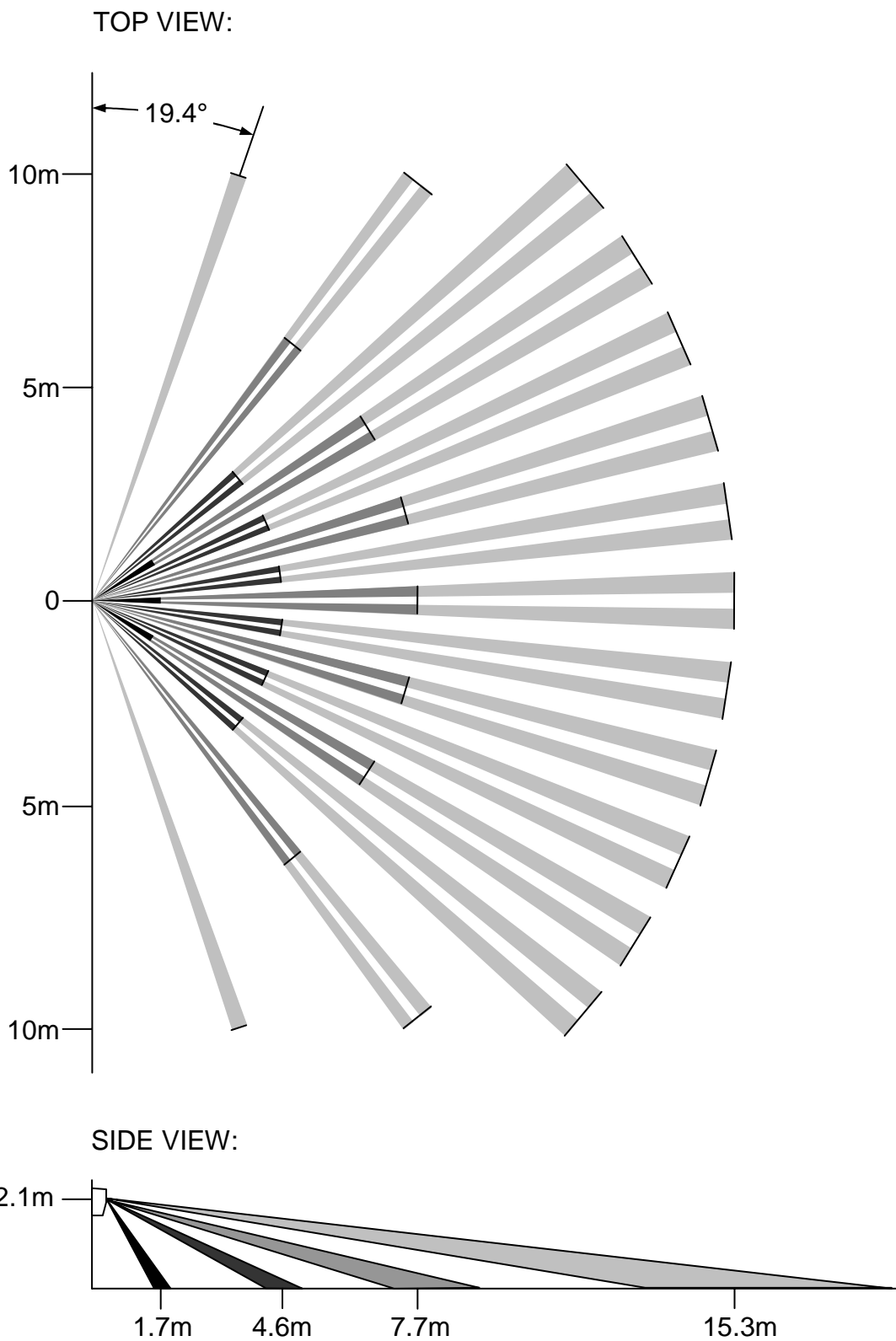


Figure 3. Distribution of beams and operating range of detector with extra wide angle lens

Latest EC declaration of conformity and product approval certificates can be downloaded from our Web site www.satel.pl



SATEL sp. z o.o.
ul. Schuberta 79
80-172 Gdańsk
POLAND
tel. + 48 58 320 94 00
info@satel.pl
www.satel.pl