# > THE DETAILS MAKE THE DIFFERENCE

■ INTEGRATED THERMOSTAT-CONTROLLED HEATING

Condensation and morning dew, humidity in the interior of the column caused by high air temperature, and snow collecting on the caps are all important factors to take into consideration for effective exterior detection. **COLIRIS II** integrates a thermostat-controlled heater (1) on each cell precluding the formation of ice, dew and condensation. It also makes it possible to melt snow on the caps or to dry out the interior of the column.

MANUAL ALIGNMENT WITHOUT SPECIAL TOOLS

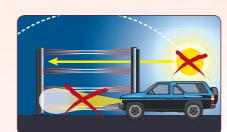
Each cell can be aligned manually without having to use special tools (screw driver, pliers, etc.). The focusing knobs (2) permit rapid and precise alignment of each cell.



• INTEGRATED OPTIONAL 230VAC OR 110VAC POWER SUPPLY COLIRIS II is available with an optional 230Vac or 110VAC power supply integrated directly in the column. Beyond the esthetic aspect (absence of an external supplementary housing), this option also simplifies wiring and allows direct control of heating. It also allows resolution of line-drop problems linked to long cable lengths on large sites. The 230Vac or 110VAC power supply can power single or double direction columns.

ANTIGLARE FEATURE

Thanks to this feature, COLIRIS II is completely immune to glare directly on the receiver from possible powerful light sources, such as the setting sun or headlights of cars.



# > TECHNICAL SPECIFICATIONS

IR barrier range (*)	50m (155ft) - 100m (330ft) - 200m (660ft)
Power supply voltage	10,5-14 ac/dc Power supply voltage for control electronics separate from that for heater
Consumption without heater	140mA each column
Heating consumption	680mA each column
Height	1m - 1,50m - 1,90m
Operating temperature	(with thermostat controlled heating) -25°C (-13°f) to +55°C (131°f)
Cell orientation	180° in horizontal plane and + or – 10° in vertical plane
response time	Adjustment of response time for detection with potentiometer (50 ms to 800ms)
Alignment	An optical sighting lens in each cell Integrated alignment assistance
Output	NC tamper output 1 timed disqualification output per NC switch and control indicator light. 1 intrusion output per NC switch and control indicator light
Number of channels	4 channels of selectable infrared pulsating frequencies
Heating	Thermostat-controlled heating on all columns
Wiring	Pre-wired columns
Options	Integrated 230V or 110VAC power supply

(\*) Range relative to visibility, not to exceed 100 m in regions where fog may be dense



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# PERIMETER SURVEILLANCE OF SENSITIVE SITES



identical column

# COLIRIS II INNOVATION IN THE

SERVICE OF RELIABILITY

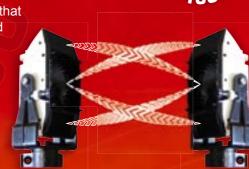
# >>> D.I.S. TECHNOLOGY (\*) 100HZ

[Dual interlaced scanning]

With D.I.S. technology (\*) 100Hz (Double Interlaced Scanning 100Hz), each cell integrates the dual function of transmitter and receiver. The infrared beams that are created are multiplexed and synchronized at a frequency of 100Hz.

Thanks to this technology, all columns are identical. The concept of separate transmission and reception modules has been surpassed.

D.I.S. TECHNOLOGY (\*) 100Hz. SORHEA INNOVATION IN THE SERVICE OF RELIABILITY! (\*) Patent pending - N°06 02310



unction cells (transmission/recei Identical quadri-beam columns

# > DOUBLE DIGITAL AUTOMATIC GAIN **CONTROL (A.G.C.)**

Double digital AGC enables compensation for variations in the incoming signal to ensure uninterrupted operation of the barrier. This digital processing of the signal is performed based on a time curve that differentiates exterior phenomena (meteorological or others) from intrusion attempts and thereby significantly reduces the number of false alarms

#### IDEAL CONDITIONS



The incoming signal level (blue) corresponds to the reference level (red).

#### ■ TRANSMITTER AND RECEIVER TOO CLOSE TOGETHER





The incoming signal level is greater than the reference level: The AGC lowers the amplification of the signal to the reference level according to the time curve.

#### ■ INCLEMENT WEATHER/UNCLEAN COVERS

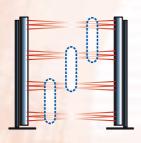




- 1 Certain exterior phenomena (fog) can lower the strength of the incoming signal received by the receiver's cells.
- 2 The AGC increases the amplification of the signal to the reference level according to the time curve.

# > ADJACENT DUAL-BEAM DETECTION AND MONO-BEAM DETECTION TIME-DELAYED BY THE LOWER

### ADJACENT DUAL-BEAM DETECTION



Detection is carried out by 2 adjacent beams, avoiding the gap of non-detection of traditional

# MONO-DETECTION TIME-**DELAYED BY THE LOWER BEAM**

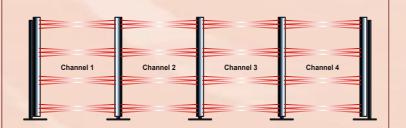


The lower beam can be configured in time-delayed monodetection mode in order to detect possible intrusions by crawling (advanced configuration by computer).

These particular functions provide COLIRIS II with a very high capacity for detection and minimise false alarm.

# SELECTABLE CHANNELS

Selectable channels allow installation of up to 4 adjacent barriers while preventing a risk of interference among them.



#### > ALIGNMENT FEEDBACK

The difficulty in aligning a long-range infrared barrier does not stem from the correct alignment of the receivers, but mainly from that of the transmitting cells of the barrier. Thanks to the bi-directional cell technology of COLIRIS II, alignment of a receiver column automatically leads to alignment of the integrated transmitter. Optimal alignment is thereby obtained and results in COLIRIS II having an extremely low rate of false alarms.



alignment of transmitters

# Alignment feedback, with automatic

### INTEGRATED ALIGNMENT ASSISTANCE

**COLIRIS II** integrates three alignment tools:

- · An optical sighting lens in each cell
- · A powerful buzzer whose audio level varies in conjunction with the incoming signal
- · An LED indicator that allows visualization of the incoming signal

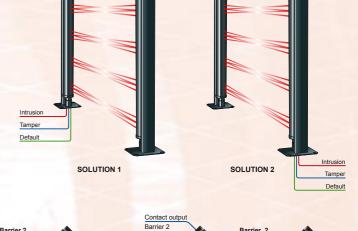
These tools allow a single person to align the cells with extreme precision without having to use an external apparatus.

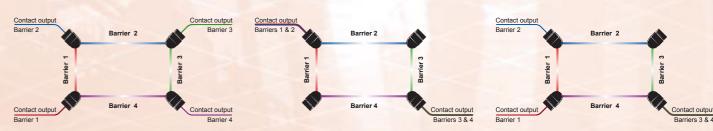


# > ALARM INFORMATION AVAILABLE FOR THE 2 COLUMNS

COLIRIS II has output switches for each column. This feature permits maximum limitation of wiring constraints. You choose with respect to your needs and constraints where to wire alarm switches, at one end or the other of the infrared barrier.

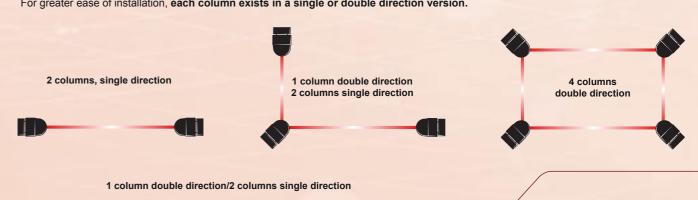
There are multiple possibilities for wiring and output switches





# > DOUBLE DIRECTION COLUMNS

For greater ease of installation, each column exists in a single or double direction version.





**COLIRIS II**