

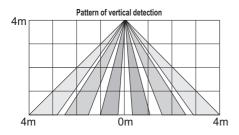






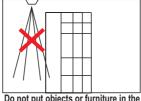
# **Detector double technology ceiling**

- Digital sensor double element (Digipyro™) 1
- Microwave sensor 24,125GHz
- · Sensibility adjustable by trimmer
- High immunity to RF 30Vm
- Nominal supply voltage of 12/24Vcc ±5%
- Maximum absorption 28mA
- Bundles of the lens 43
- Covering angle 360°
- Covering 8mt
- Relay output solide-state NC 100mA, 50Vcc max. 1
- Stabilisation initial time 40"
- Local reporting of alarm memory
- New function AND / OR automatic (anti-masking) programmable
- · Tamper of protection anti opening
- Pulse-count function 1 ÷ 4
- Signaling LED
- · Degree of safety 1
- Environmental category 2
- Dimensions(A) 31mm
- Dimensions( (Ø) 85mm
- Complying with standard CEI EN50131-1





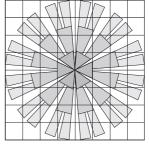
Do not install toward heat source or air conditioners

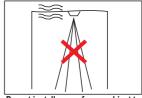


Do not put objects or furniture in the bundle of detection









Do not install on surfaces subject to vibration

# DT360 - User Manual



The volumetric detector DT360 is fitted with circuits produced with SMT technology to ensure more stability in use phase and more immunity to electromagnetic disturbances.

Adjusting sensitivity allows the installation in any environment that needs for a volumetric protection discrete and secure.

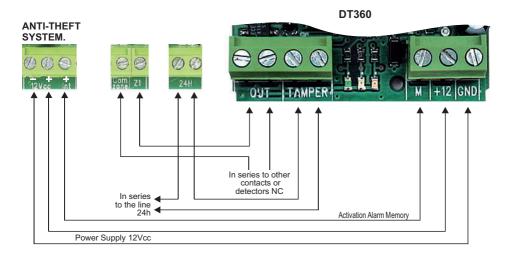
The function "Alarm Memory" reported by incorporated LED enables to recognize which detector caused the alarm when more detectors appeared in series on the same zone; the connection of interrupted positive (+12V Int.) of the central will serve to reset this function to every rehabilitation of anti-theft system.

# **INSTALLATION**

It is better to install the detector to a height of about 3,2mt to have a coverage of about 4mt radius; the installation to a smaller height reducing protection radius, while the installation at a height of more than 4mt. may result a sufficient protection.

**NOTE:** Do not direct the detector towards objects tha could produce rapid temperature fluctuations like radiators, electric radiators, air conditioners, naked flame, etc.

- To prevent also the installation in the proximity of them.
- Not mask partially or completely the field of view of the detector.
- To establish the connections as follows:
   Modular terminal M can be conected to +INT of anti-theft system if you want to activate the alarm memory function, or else shall be left not connected.





## **FUNCTIONING**

DT360 functions in "double technology"; this means that only if both technologies detect (typical *functioning AND*), can be a real intrusion and raised the alarm on relay. In this way can be distinguished false alarms caused by activation of one infrared sensor (sometimes caused by for ex. sunshine) or of the only microwaves sensor (sometimes caused by for ex. moving objects).

To increase degree of safety, in the DT360 is added a Pulse-count to count detected alarms, and when reahced configured value, is enabled relay OUT.

# **•SWITCHING ON**

When supply voltage is applied RED LED blinking for about 40 seconds during the phase of stabilization circuit.

### IR SECTION

To each reporting of IR SECTION the YELLOW LED goes on

# MICROWAVE SECTION

To each reporting of MICROWAVE SECTION the GREEN LED goes on

NOTE: By rotating the Trimmer is possible to adjust the sensitivity. **Trimmer adjustement** acts both on the microwave section and infrared.

# FUNCTIONING "AND"

In the normal functioning when detect a movement from both technologies the red LED goes on and opens relay output.

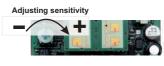
FUNCTIONING "OR automatic" (anti masking)
 Activatingthis function (SW3=ON) the detector reports the alarm when only one of the sensors detect several times some movements over 30 seconds.

This functionality prevent to take out the sensor masking only one of the two detection movement technologies and to protect the detector from possible break-ins.

#### **PULSE-COUNT**

- If the number of pulses is programmed to one, the detector active right now also the output OUT (contacts opening) and reports detection to burglar system central unit.
- If the number of pulse programmed is higher than one, the red LED reports with blinking the first detection than will take a two seconds recess
- If the state movement detection continues or a new event occurs within 15 seconds the red LED repeat reporting.

When number of impulse reports reaches the programmed number , the red LED goes on and the OUT contact is opened to reports the alarm to burglar system central unit.





SW3=ON (OR automatic)

PIR or microwave SE > 30"



SW3=OFF (AND)
One of the two PIR,
both + microwave

NOTE: Passed about 15 seconds from the last detection, pulse counter resets.



#### PULSE-COUNT

Each flash from RED LED (that is to say each Microwave detection + PIR, only Microwave or only PIR) is counted. Passed the livel set into pulse-count the RED LED goes on and the relay is activated generating the alarm.

Whatever the number of pulsees programmed and the state of activation/deactivation of the function OR (anti-masking), if a sensor detect a great movement, the detector goes in alert, goes on the red LED rosso and opens the contacts on the output OUT immediately without the need nor to reach the number of the pulses programmed nor to detect a movement with the other technology.

SWITCH1/SWITCH2 To position the dip-switch according to the value wanted:



1 Pulse SW1=OFF SW2=OFF



2 Pulses SW1=ON SW2=OFF



3 Pulses SW1=OFF SW2=ON



4 Pulses SW1=ON SW2=ON

# • EXCLUSION REPORTING LED

Taking dip switch 4 in ON (**SW=ON**) are disabled the reports of detection and alarm of the LED. The only reports still active are the initial blinking when the detector swithing on and the blinking to activate memory entry.



SW4=ON (exclusion activated)



SW4=**OFF** (exclusion deactivated)

#### SUMMARY LED FUNCTIONING LED

- > red LED : using supply voltage goes on for about 40 seconds during circuit stabilisation phase.
- > yellow LED: goes on to report the operation of infrared detection.
- > green LED: goes on to report the operation of detection of microwave section.

#### ALARM MEMORY

This function identifying which detector has generated an alarm.

To activate the alarm memory to conect the entry "M" to output "+INT" of anti-theft system..

#### Functioning red LED (alarm memory)

- Slow blinking (5 sec.): insert.
- Fast blinking: reporting of sensor detection with alarm memory activated.
- Fixed switched on : reporting of sensor detection without alarm memory activated.

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