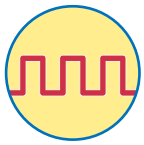
1. INTRODUCTION

BOND Plus detectors represent the best choice for residential and industrial installations in the security sector. It use only digital PIRs, thus avoiding the conversion that generally must be done in traditional detectors, where the analog PIR is amplified and converted to digital. Thanks to the TOTALLY digital technology, the detector is much more accurate in detecting intrusions and not suffering of alterations such as: white light, ultraviolet light, temperature, air movement due to heating/cooling systems and it is totally immune to radiated and conducted electromagnetic disturbances. Bingo Plus detectors are equipped with lenses made by Fresnel Technologies, Inc. LODIFF® technology for optics realization in combination with POLY IR® materials make it a product with highest quality and efficiency.

Hiding the camera together with the motion detector made its appearance no different from the standard PIR sensor, thanks to which the camera remains invisible to bystanders and it is possible to record criminal activities without the risk of unmasking the monitoring system. The camera is equipped with a miniature pinhole lens, which due to its size is discreet and unobtrusive.

White light protection

The detector is digitally filtered from white light.



Full digital PIR

The detector has no analog components, the full digital PIR is connected directly to the microprocessor.

High RFI protection

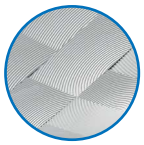
Thanks to the total lack of traditional amplifiers, the detector has a very high RFI immunity.

Pet immunity

All our detectors are pet immune up to 20Kg, thanks to the new lens design combined with the digital analysis system.

Ultraviolet stabilization
POLY IR®4 material for lenses

The lens is molded in POLY IR® materials. These materials offer the best combination of transmittance, environmental stability, and color of any polymer. Materials available for the 8-14 micron region of the infrared.



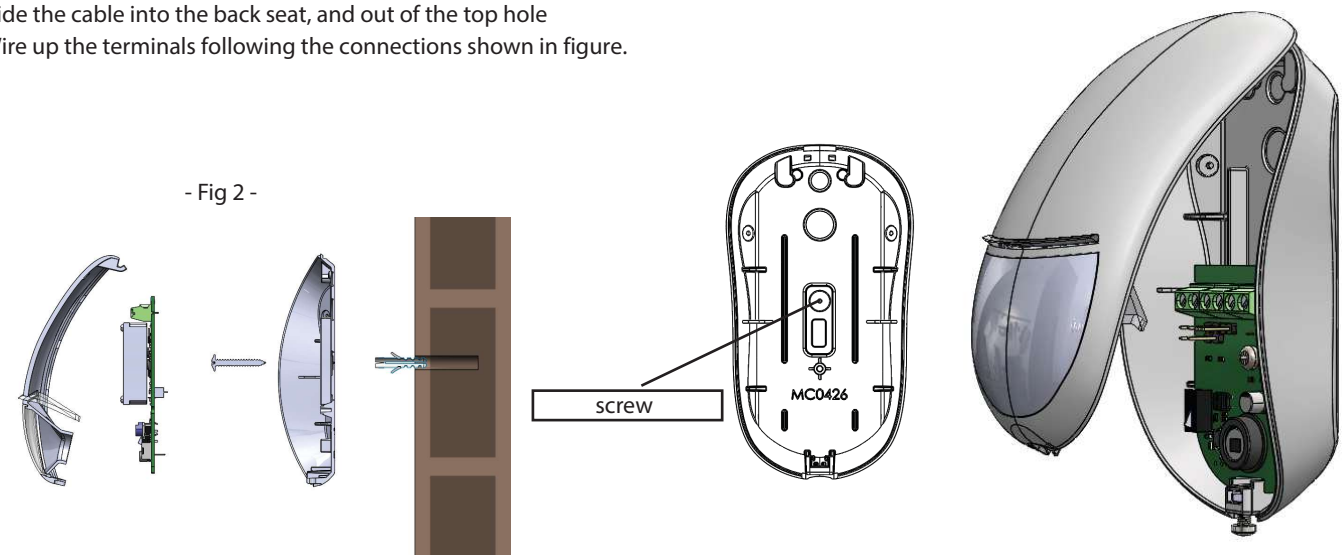
LODIFF® Fresnel Lens Technology

The lens array is made by tiling pieces of LODIFF® lenses. These lenses offer significantly improved performance over typical constant-groove-width Fresnel.

2. INSTALLATION PROCEDURE

- By using a thin screwdriver, loosen the screw on the bottom and open the housing (see figure 1)
- Remove the PCB from the base by levering on the ABS supports (see figure 2)
- Pierce the knock on the base of cover on the desired point for fixing (or use the optional swivel bracket not certified IMQ)
- Pierce the kconck on the base and fix a screw between wall and cover for back tamper protection (see fig2)
- recommended height from 1.8mt to 2.2mt
- slide the cable into the back seat, and out of the top hole
- Wire up the terminals following the connections shown in figure.

- Fig 2 -



NOTE: do not cover, partially or completely, the field of vision of the detector

- Fig 1 -

Camera parameters

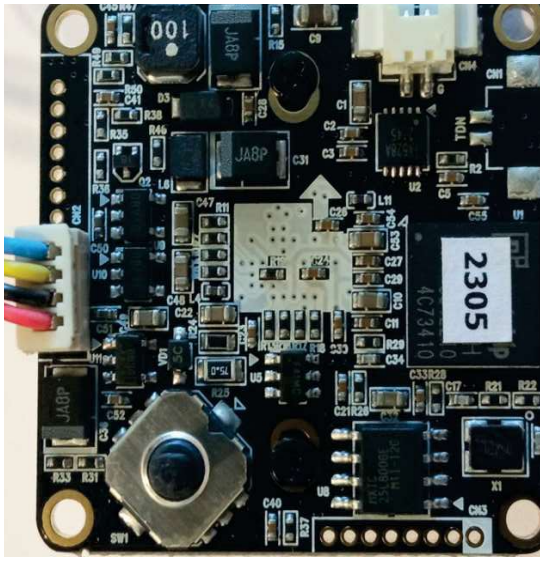
•1/2.9" SONY 2.3M CMOS Sensor (IMX322)
•4 Working systems: AHD, TVI, CVI, CVBS
•D-WDR (Digital Wide Dynamic Range)
• DNR noise reduction: 2DNR and 3DNR
• Joystick OSD control
• 4.3mm pinhole lens
• Very low power consumption

The camera with the sensor is mounted indoors to horizontal (e.g. wall) and vertical (e.g. ceiling) surfaces using the optional P4VID bracket available in our offer.

The AHD, CVI, TVI and CVBS interface (it can be connected directly to a TV set with an analog input) enables the transmission of a digital video signal via coaxial cable in 1080p resolution.
Due to the convenience of installation, we also recommend a standard UTP (twisted pair) cable.

** Attention*
When connecting a signal, e.g. to a video recorder, use a video transformer available in our offer (only for the recorder input).
The maximum length of the cable is approx. 250m assuming that this cable is used only for video transmission.
If other cores of this cable are used for e.g. sensor power transmission, the video range may decrease several times and image distortions may appear.

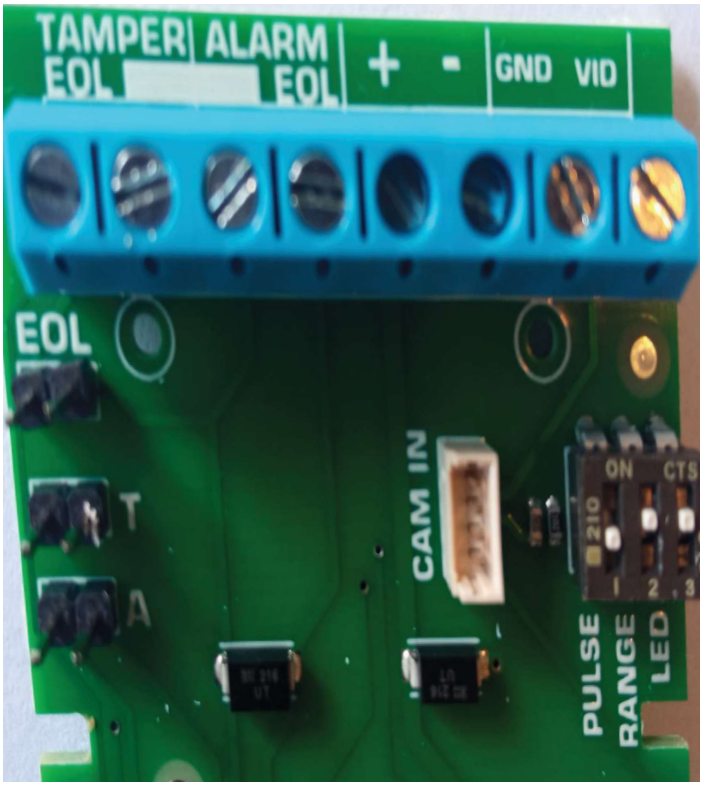
Switching the camera working mode AHD / TVI / CVI / CVBS



* possible only after removing the camera module from the holders by using the miniature joystick.

AHD -H => CVBS - Hold "Left" button
CVBS => AHD -H - Hold "right" button
AHD => TVI/CVI - Enter the menu (press joystick) and move the cursor to EXPOSURE.
Press the right button 3x and OK.
A hidden menu will be displayed to change to TVI or CVI

3. ADJUSTMENTS AND CONNECTION



TERMINAL

- TAMPER - sabotage output NC
- ALARM - alarm output NC
- "+" oraz "-" - power supply
- GND - video grounding
- VID - video output signal

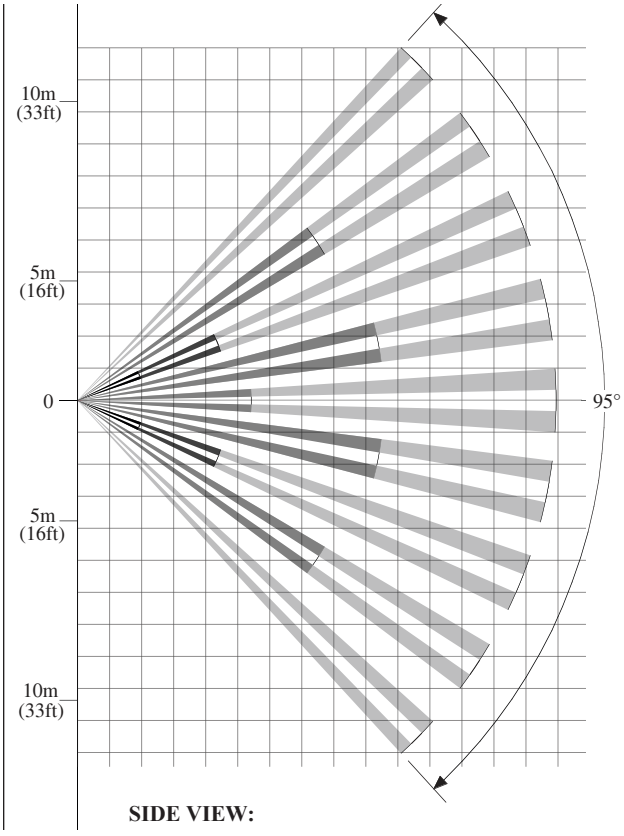
DIP Switch

Dip 1--> off =1 pulse - on = 2 pulse
Dip 2 --> off = 7mt - on =15mt range
Dip 3 --> off = led off - on = led on

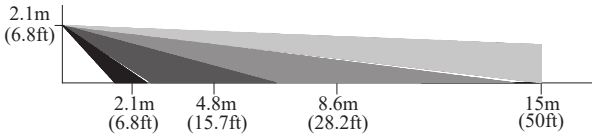
EOL

Jumpers T - A - EOL open = all contact Free without resistors
Jumpers T - A - EOL closed = double balancing (alarm2k2 - tamper 4K7) (option)

Technical Features	BOND Plus
RANGE	15 m
ANGLE	100°
LENS	Fresnel Lens LODIFF® POLY IR®4 material
LED	blue
ALARM TIME	2"
SELF TEST	-
WALK TEST'S LED	YES
POWER CONSUMPTION	160mA
SOLID STATE RELAY	YES
INTERNAL EOL RESISTORS	YES
CREEP ZONE	YES
ANTI-OPENING TAMPER	YES
BACK TAMPER	YES
ANTI-MASKING DEVICE	-
PULSE COUNTER	YES
RFI PROTECTION	30 V/m
TEMPERATURE COMPENSATION	YES
FULL DIGITAL	YES
BRACKET AVAILABLE	YES
POWER SUPPLY	9-15VDC (Typical 13.8VDC)
HOUSING	ABS
PET IMMUNITY	YES
OPERATING TEMPERATURE	from -20°C to +50°C
DIMENSIONS	114 x 63 x 40 mm



SIDE VIEW:



Installation must be carried out following the local installation norms by qualified personnel.
The manufacturer refuses any responsibility when changes or unauthorized repairs are made to the product/system.
It is recommended to test the operation of the alarm product/system at least once a month. Despite frequent testing and due to, but not limited to, any or all of the following: tampering, electrical or communication disruption or improper use, it is possible for the product/system to fail to prevent burglary, rubbery, fire or otherwise. A properly installed and maintained alarm system can only reduce the risk that this happens.