

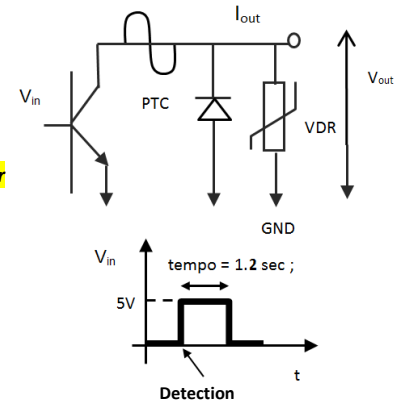
TM150 INSTALLATION GUIDE— UK - V01.01

1. CONNECTION: **WARNING: positive security – contact given for powered radar - powered off, NO and NC are reversed**

EU: 220 V		
Symbol	Colour	Function
	Yellow/Green	GND
~	Blue	POWER (neutral)
~	Brown	POWER
	White	COM
	Grey	NO
	Yellow	NC

LV: 10-60 VDC – 10-42 VAC		
Symbol	Colour	Function
	Yellow/Green	N/A
~	Red*	POWER (neutral)
~	Black*	POWER
	White	COM
	Yellow*	NO
	Blue*	NC

LP: 6-20 V		
Symbol	Colour	Function
+	Blue	POWER
-	Brown	GND
Open collector (fig. 1)	Yellow	OUTPUT



***01/01/13: NEW WIRING COLOURS for Radars with S/N starting from 1203826 or higher**

2. REMARKS:

- Please use a bipolar circuit-breaker for the connection and disconnect the radar from power before maintenance intervention.
- The faston for connection to PCB must be protected with thermo sheath.
- Cable: 6x0.5mm² comply British standard 7671
- Connection: bulgin PX 0738/P – PX 0739/S

3. SETTINGS:

Speed threshold programming:

The speed threshold is set by the position of the dipswitch 1 to 4 as shown in the table below. To select the speed threshold, place the DIP SWITCH control levers (accessible without dismounting the front face, see fig. 3) as shown on fig. 5. Factory setting is 1 km/h.

Direction detection setting:

The direction detection is set by the position of the dipswitch 5 & 6 as shown in the table below. To select the direction detection, place the DIS SWITCH control levers (see fig. 3) as shown on fig. 4. Factory setting is IN. **Don't forget to place the protection sticker on the radar's front face (fig. 3)!!!**

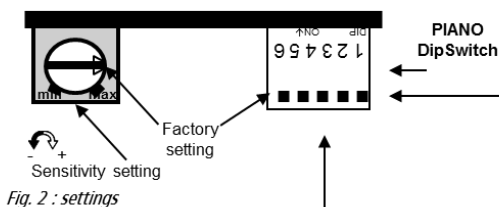


Fig. 2 : settings

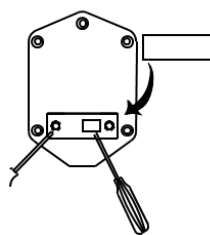


Fig 3. : front face

Direction settings	Switch pos.
IN	
OUT	
Two directions detection	

Fig. 4 : DIPSWITCH position for direction detection setting

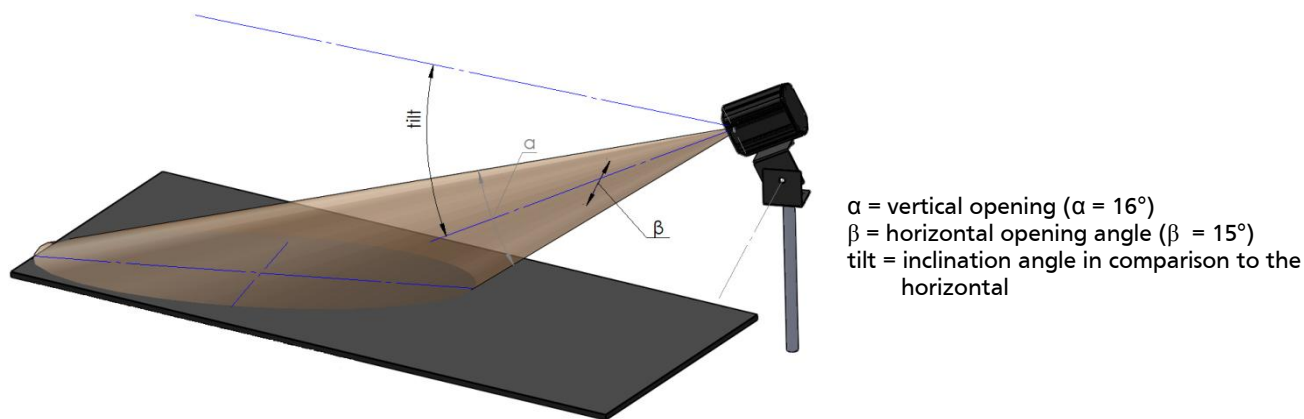
Speed Switch threshold pos.	Dipswitch pos.	Speed Switch threshold pos.	Dipswitch pos.
1 km/h		9 km/h	
2 km/h		10 km/h	
3 km/h		11 km/h	
4 km/h		12 km/h	
5 km/h		13 km/h	
6 km/h		14 km/h	
7 km/h		15 km/h	
8 km/h		16 km/h	

Fig. 5 : DIPSWITCH position for speed threshold setting

Once the settings are done, don't forget to place the protection sticker on the radar's front face (fig. 3). **WARNING: the warranty does not cover the radars without protection sticker!!!**

4. **INSTALLATION:**

If $h \leq 5 \text{ m}$, $\alpha > 88^\circ$ or if $h > 5 \text{ m}$, $\alpha \leq 88^\circ$. Please contact your distributor for further information.



α = vertical opening ($\alpha = 16^\circ$)
 β = horizontal opening angle ($\beta = 15^\circ$)
 tilt = inclination angle in comparison to the horizontal

Fig. 6: Detection lobe

Detection pattern:

We have calculated some detections patterns surfaces, based on common installation parameters. Please note that these values result from theoretic calculations and do not take in account environmental factors. These values are given for the sensitivity factory setting (see fig. 2).

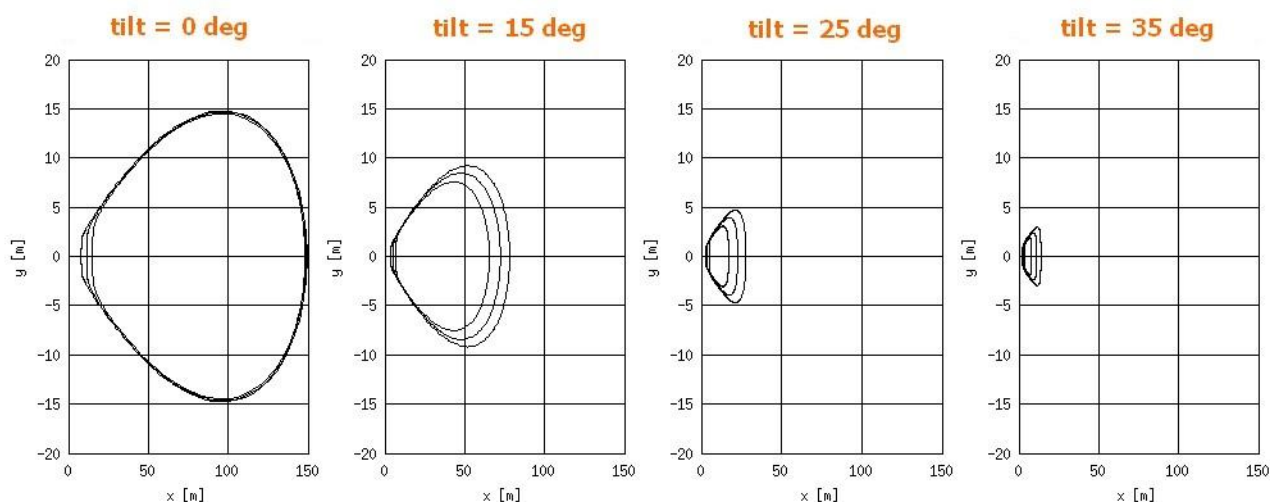


Fig. 7: Dimensions of the lobe following the installation parameters

5. **TECHNICAL CHARACTERISTICS:**

	TM150-EU	TM150-LV	TM150-LP
Protection level		IP 65	
Power supply	220 VAC $\pm 10\%$ – 50 Hz	10-42 VDC – 10-30 VAC – 50 Hz $\pm 10\%$	6-15 VDC
Power consumption	4 VA	< 1 VA	90-120 mW under 6 V (15-20 mA)
Detected object min. speed	Following chosen speed threshold		
User output	Inverted relay contact Resistive load: 110 VAC 0.3 A – 24 VDC 0.3 A Inductive load: 110 VAC 0.2 A – 24 VDC 0.3 A Visible led on front face		Open collector max. 65mA under 40 V Visible led on front face
GR option	Inverted relay contact 250 VAC – 30 VDC – 0.3 A Visible led on front face		/
Relay hold time	1 sec.		1,2 sec.
Temperature range	-40° C to +75° C		
Dimensions	L70 x H100 x P249 mm		
Weigh	1150 gr	1050 gr	

Tip: RED LED: if you don't want it to be visible: reverse the polycarbonate sticker on the front of the radar.