

PrimeTec A PrimeScan A

Combined detector AIR/Radar for opening and protecting automatically controlled sliding doors

Please keep for further use!

Translation of the original instructions

General

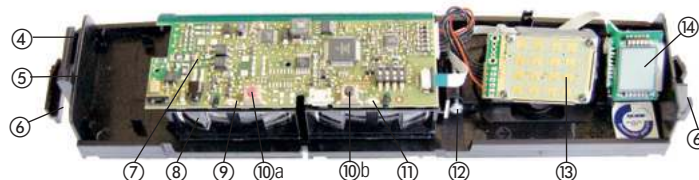
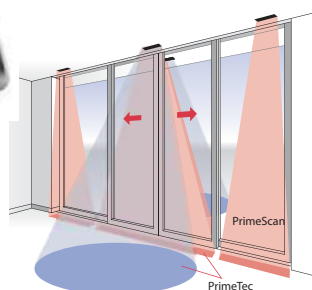
PrimeTec A



PrimeScan A



a) IR-receiver
b) IR-transmitter
c) red LED
d) green LED



① Hood
② LED display
③ AIR light window
④ Cable bushing
⑤ Detector without hood
⑥ Mounting holes
⑦ Detector electronic
⑧ lense-cover
⑨ LED1 AIR: red (left)
⑩a Button Mode (red)
⑩b Button Data (black)
⑪ LED2 Microw.: green (rig.)
⑫ AIR adjusting device
⑬ Microwave module
⑭ LCD display

1 Safety instructions

Observe the national and international regulations on door safety.
Only trained, qualified personnel may mount and start up the detector.



The unit may only be opened and repaired by the manufacturer.

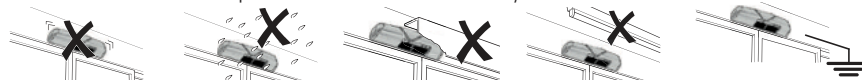
The unit may only be operated from a safety extra-low voltage (SELV) system with safe electrical separation.

Always consider the safety functions of your application as a whole, never just in relation to one individual section of the system.

The installer is responsible for carrying out a risk assessment and installing the detector and the door system correctly.

Avoid touching any electronic components.

The door drive and transom profile must be earthed correctly.



Start-up

Recommended start-up sequence: I. Mounting II. Connection III. Initialisation

2 Mounting

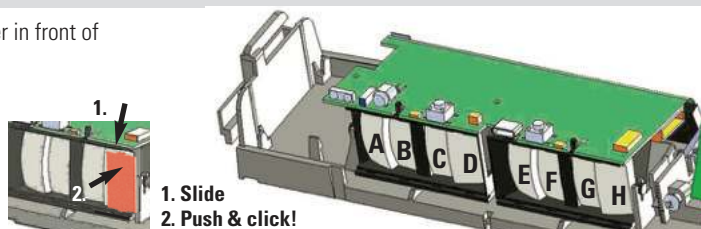
- I
1. Remove cover hood
2. Set AIR field width (see chapter 2.1)
3. Lay and connect cable
4. Mount detector

2.1 Setting the AIR field width (PrimeTec / PrimeScan)

The width of the AIR field can be set using the click-in plastic cover in front of the detector's lens.

* Field width:
Detector without cover: 2.3 x 0.2 m
All light beams are active at 2.2 m

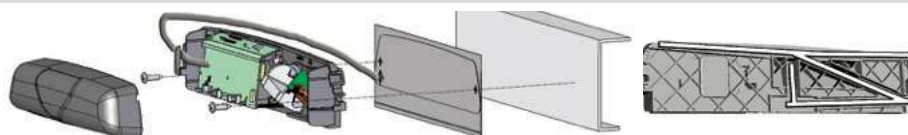
Possible field width settings (Dimensions at 2.2 m mounting height):



A, B, G, H covered Field width: 0.25 x 0.2 m	E, G, H covered Field width: 0.75 x 0.2 m	G, H covered Field width: 1.2 x 0.2 m	A, B, G, H covered Field width: 0.25 x 0.2 m
A, D covered Field width: 1.3 x 0.2 m	A, B, D covered Field width: 0.75 x 0.2 m	A, B covered Field width: 1.2 x 0.2 m	A, B, G, H covered Field width: 0.25 x 0.2 m

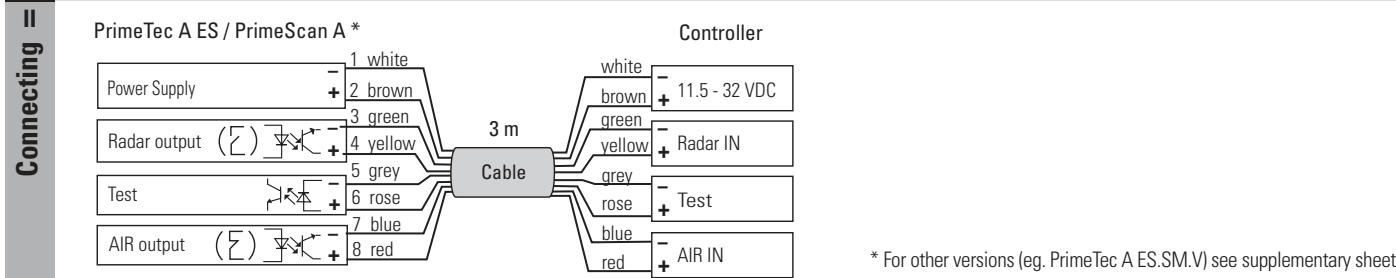
2.2 Mounting of the detector

1. Position drill template
2. Drill the holes, remove drill template
3. Lay cable and mount detector



*Factory setting

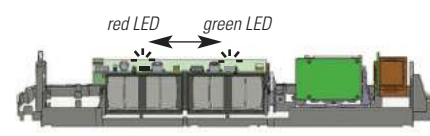
3 Electrical connections



4 Initialisation

III Initialisation

Remove the current supply all objects that do not form part of the usual door system environment from the door area BEFORE switching on.
 Make sure that no-one is in the door area, otherwise correct startup will not be possible.
 The alternate flashing shows the initialisation (teaching) of the detector (Duration 20 - 25 seconds). During startup, the firmware version FXXX is displayed.
 Once the detector has been connected to the power supply, it can be configured via the Reglobeam within the next 30 minutes. Following initialisation, the red/green LED only lights up when a detection has occurred. **The door system has been taken into operation at this point.**
 If any further settings or calibrations are required, proceed as described in the following sections.

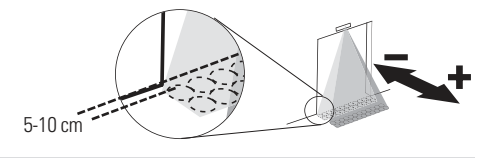
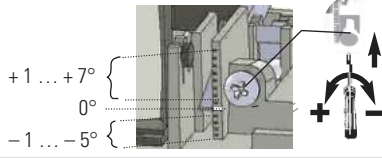


5 Mechanical fine tuning

5.1 AIR-field (PrimeTec / PrimeScan)

Settings of the inclination angle on the adjustment screw:

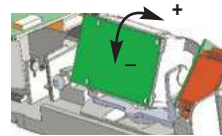
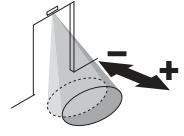
Inclination: -5° ... +7° continuously adjustable



5.2 Radar field (PrimeTec)

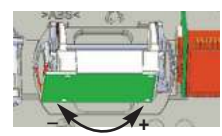
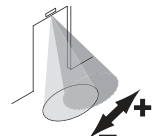
Manual settings of the inclination

0° ... +90° in 5° steps

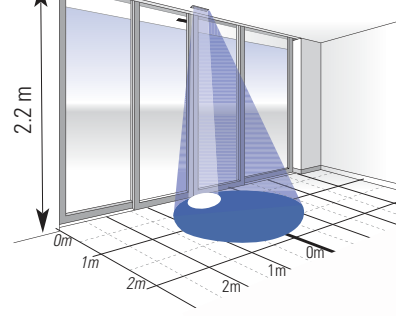


Manual settings of the pivoting

-20° ... +20° in 5° steps

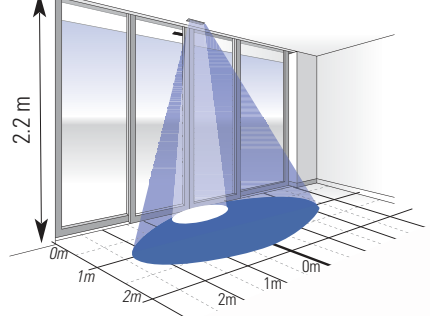


Round radar field → see table parameter 3



min. = 0.5 x 0.5m (WxD)
max. = 2.7 x 1.9m (WxD)

Wide radar field → see table parameter 3



min. = 1.1 x 0.6m (WxD)
max. = 4.7 x 1.7m (WxD)

6 Configuration with Reglobeam remote control (refer to RegloBeam 2 operating instructions)

Remote control:	Basic functions of the remote control:						
IR interface	Function	Start key	Function key(s)	Number key(s)	Display on remote control	Function of the remote control	Notes
	Establishing the connection	Ⓞ	none	none	Ⓞ Continuously lit Ⓞ flashes	→ Connection to the detector → No connection to the detector	If Ⓞ flashes, hold the remote control closer to the detector and point it more directly at the detector, also check the batteries.
	Establishing the connection with address selection	Ⓞ	none	① - ⑧ It is not possible to access ⑧ by Reglobeam.	Ⓞ and the number of the selected number key	Address = Number of the selected number key	If Ⓞ flashes, no connection, If Ⓞ and all numbers light up, no configuration mode is activated.

7 Configuration by hand (Operator buttons)

	Automatic	Config. mode	Choose Radar AIR	Choose General	Funct./Parameter	Back to choice	Back to autom.
LCD Operator buttons red (Mode) & black (Data)	A ①②	[①②]	[①②]	[①②]	[①] 1.3	[①②]	A ①②
	A: Automatic mode t: test active ① Radar output on ② AIR output on	Press both buttons simultaneously	Red button: Changes between Radar, AIR and general functions	Black button: choose	Red button: Choose parameter * Black button: Choose value of the parameter	Press both buttons	Press both buttons Switches to automatic mode (A) automatically after 1 min

*) Value is going to be saved by switching to other parameters

Radar functions (Prime Tec)		OPERATION OF THE BUTTONS ¹		REGLOBEAM (REMOTE CONTROL) ²	
		Parameter (Mode); Value (Data)	LCD	Mode	Significance of number keys
Field width		1 1-5	[1] [1.3]	D	① = Smallest radar field, ② ③* = Medium radar field, ④ ⑤ = Largest radar field size
Direction recognition		2 1-3	[1] [2.2]	F + ⑧	① = both directions, ②* = Forwards ③ = Backwards
Field geometry		3 1-2	[1] [3.2]	F + ⑨	① = round radar field ②* = wide Radarfield
Cross Traffic Optimisation		4 1-5	[1] [4.2]	F + ⑤	① = Off, ②* - Low, ③ ... ④ = middle, ⑤ - High (① - ⑤) = Sens. values for cross traffic masking) (Expedient only at round field)
SMD field width (Slow Motion Detection)		5 1-5	[1] [5.1]	F + ③	①* = Off, ② = Low, ③ ... ④ = middle, ⑤ = Largest SMD field
Door filter		6 1-4	[1] [6.1]	F + ⑥	①* = Filter off, ② = Door filter on (Movements of the door), ③ = Interference filter on (EMV flows, e.g. fluorescence tube), ④ Door and interference filter on
Radar exit		7 1-3	[1] [7.1]	F + ②	①* = active, ② = passive, ③ = Radar off (not possible with SM-version)

AIR functions (Prime Tec / PrimeScan)		OPERATION OF THE BUTTONS ¹		REGLOBEAM (REMOTE CONTROL) ²	
		Parameter (Mode); Value (Data)	LCD	Mode	Significance of number keys
Set sensitivity		1 1-4	[2] [1.3]	E + ①	① - high sensitivity (acc. to DIN 18650 ≤ 3.5m) ④ - low sensitivity ② - medium sensitivity (acc. to DIN 18650 ≤ 3.2m) ⑤ - very low sensitivity ③* - normal sensitivity (acc. to DIN 18650 ≤ 2.6m)
Set teach-in time		2 1-5	[2] [2.3]	E + ⑥	① = 10 s, ② = 30 s (acc. to EN 16005), ③* = 60 s (acc. to DIN 18650 + AS 5007), ④ = 180 s, ⑤ = 15 min
AIR exit contact logic		3 1-4	[2] [3.2]	E + ②	① = active = No detection = contact open ②* = passive, = No detection = contact closed
AIR exit		4 1-2	[2] [4.1]	A + ①	①* = on, ② = off (AIR is going to be reactivated automatically after 15 minutes)
Manual background teaching		-	-	A + ③	Teaching background (Background is taught when red LED extinguished). Duration approx. 5 sec.

General functions (Prime Tec / PrimeScan)		OPERATION OF THE BUTTONS ¹		REGLOBEAM (REMOTE CONTROL) ²	
		Parameter (Mode); Value (Data)	LCD	Mode	Significance of number keys
Reset		-	-	A	⑨ Initialisation
Connection		-	-	A + ①	③ = Switch off configuration mode by Reglobeam. Switching on by access code or power cut.
Comfort settings (After a comfort setting and leaving the configuration mode a reset will be enforced)		1 1-8 Press Data for 1-8 seconds to change the comfort setting	[1] [1.1]	C	①* = Standard, ② = foot path, ③ = home for the aged, ④ = wind screen, ⑤ = high door, ⑥ = narrow door, ⑦ = wide door, ⑧ = factory settings For all values set, parameter U is displayed
Activate / not activate combined exits		2 1-2	[1] [2.2]	E + ⑨	① = activated (AIR or radar actuate both the radar exit) ②* = not activated
RegloBeam 2 address (communication remote control ↔ detector)		3 1-6	[1] [3.1]	E + ⑧	①* = Address 1, ② = Address 2, ③ = Address 3, ④ = Address 4, ⑤ = Address 5, ⑥ = Address 6 In the case of overlapping AIR fields consider the addressing order: → odd number ① → even number ② → odd number ③
Access code (By pressing both operating buttons simultaneously it can be switched to the configuration mode of the general functions)		-	-	C + ⑨ C + ⑨ C + ⑨	Status ① lit = on ② lit = off Choose code (1111 - 9999) Press ④ Press ④ x 4

¹ Press both buttons shortly for configuration mode // ² Press start key ④ before switching on the configuration mode. / The green LED lights up quickly when receiving data

* Factory sett.

8 Remediating malfunctions

8.1 Remediating false tripping

red LED	green LED	Fault	Remedy
dark	continuously lit	Radar tripping when door is closing	1. Set angle of radar further away from the door. 2. Adjust radar field size.
		Radar false tripping without apparent external influence	1. Avoid light sources (e.g. fluorescent tubes) in the immediate vicinity of the detector. 2. No moving objects (e.g. plants, advertising posters, etc.) in the vicinity of the detector. 3. Avoid strong vibration at the radar detector 4. Possible influence from a second radar detector in the vicinity (very unlikely)
continuously or recurrent lit	dark	AIR tripping when door is closing	1. Set angle of AIR detector further away from the door
		AIR false tripping without apparent external influence	1. Avoid light sources (e.g. fluorescent tubes) in the immediate vicinity of the detector. 2. Avoid puddles of water on the ground. 3. Avoid strong vibration at the AIR detector. 4. Influence of overlapping AIR field from another detector. Set new Reglobeam address or CAN bus address. 5. Reduce sensitivity of the AIR (increase the value).
dark	dark	Door stays open	1. Switch AIR exit contact logic to other value

8.2 Remediating detector malfunctions

red LED	green LED	LCD	Fault	Remedy
flashing	dark		1: Self test (RAM/ROM) 2: Watchdog	1. Disconnect device from supply voltage 2. Clean lens 3. Restart device 4. If device displays fault again or does not start → renew device
dark	flashing		3: Radar fault 4: Radar exit fault (SM)	1. Disconnect device from supply voltage 2. Check plug on microwave module 3. Restart device 4. If device displays fault again or does not start → renew device
flashing	dark		5: AIR fault 6: AIR exit fault	1. Disconnect device from supply voltage 2. Clean optics-cover and check for scratches 3. Restart device 4. If device displays fault again or does not start → renew device

9 Technical data

PrimeTec / PrimeScan	
Technology	Active infrared (wavelength: 880nm), radar double field module → PrimeTec (24.125 GHz)
Number of IR spots	36
IR spot dimensions	3 cm x 3 cm (at 2.2 m mounting height)
Response time	< 200 ms
Mounting height	1.8 – 4 m
Angle setting of IR spots	5° - 7° continuously adjustable
Electrical power supply	≤ 120 mA @ 11.5 – 32 VDC
Power consumption	< 4 watts
Making current	≤ 240 mA
Exit (AIR / Radar)	Optocoupler (50 VDC, 20 mA)
Protection type	Suitable for use acc. to IP54
Remote control range	3 m
Operating temperature	- 20° to 60° C
Dimensions	PrimeTec: 260 x 60 x 48.5mm (LxWxD), PrimeScan: 216 x 60 x 47.5mm (LxWxD)
Weight	PrimeTec: 250 g, PrimeScan: 180 g
Life cycle	20 years

10 EU Declaration of Conformity

See attachment

11 WEEE



Devices with this symbol must be treated separately during disposal. This must be done in accordance with the laws of the respective countries for environmentally sound disposal, processing and recycling of electrical and electronic equipment.

12 FCC approval



This device meets the requirements of Part 15 of the FCC regulations and the RSS-210 standard of Industry Canada.

Warning: Changes or modifications made to this device may void the FCC authorisation to operate this device.

13 Contact

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Designed in Switzerland / Made in China