



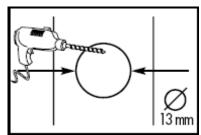
MICROCELL SC User's Guide

MICROCELL SC infrared barriers are responding to the change in requirements in the area of providing safety of automatic doors for pedestrians. Because of their reduced size, they fit discreetly into all door profiles. Multiplication of microprocessor operators, definition of new safety standards and concern for better protection of pedestrians have led to the development of a new flexible ,high-performance range. It doesn't need control box, convenient to wire and install.

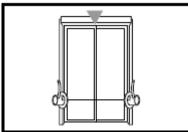
| TECHNICAL<br>SPECIFICATIONS | Mounting height       :         Distance between beams       :         Distance with respect to       :         The plane of the doors       :         Minimum range       :         Maximum range       :         Beam aperture half-angle       :         Detection mode       :         Response time       :         Supply voltage       :         Power consumption       .         Emitter       :         Receiver       :         Output (Open-collector transistor         Maximum voltage       :         Maximum current       :         voltage drop       : | Active infrared, microprocessor<br>0.3mminimum above the ground<br>0.5m minimum(crossed beams)<br>2cm<br>1m<br>5m-for minimum height of 0.3m<br>8° /12°<br>Presence(by interruption of the beam)<br>≤ 25ms(beam set-up of cut-off)<br>12V to 24V DC -5/+20%<br><10mA<br><10mA<br><10mA<br><10mA<br><2V at 30mA<br>-20°C to +60°C | Immunity<br>• sunlight<br>• incandescent lamp<br>• electrical and<br>radiofrequency<br>interference<br>Detection head sealing<br>Dimensions<br>• detection heads<br>Cable length<br>Weight<br>• emitter<br>• receiver<br>Housing material<br>Wires color (head)<br>• emitter<br>• receiver<br>Wires color(cable)<br>• emitter<br>• receiver | <ul> <li>75000lux</li> <li>25000lux(angle of 12°)</li> <li>in accordance with<br/>89/336/CEE</li> <li>IP65(DIN40050)</li> <li>body:10mm × 12.4mm<br/>(embedded length × diameter)<br/>collar:15.6mm(diameter)</li> <li>5 m</li> <li>0.134kg</li> <li>0.137kg</li> <li>ABS</li> <li>red/black</li> <li>red/white/black</li> <li>red/white/black</li> <li>red/white/black</li> <li>red/white/black</li> </ul> |
|-----------------------------|---|--|---|---|
| DETECTOR<br>DESCRIPITON     |   | omposed of cylindrical heads which unting accessory  |   | Face mounting set(option)   |
| TOOLS                       | drill bit : 13 mm or 1/2"   | flat screwdriver :<br>2,5 mm or 1/10"  | $\supset$   |   |
| DIMENSIONS                  | D=12.4  | ·  |   |   |
| INSTALLATION                | Single barrier (On<br>EA  | RA   | EA<br>RB  | (two MICROCELL SC)  |



- Make a mark.
- Make sure that the barrier is at least 30 cm away from the ground.

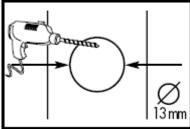


 Drill a 13 mm (or 1/2") hole in each door upright.

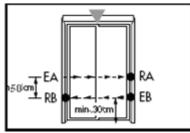


 Slide the heads and cables into the profiled sections.

- Choose the two installation heights.
- Make sure that the two barriers are at least 30 cm apart.
- Make a mark.
  Make sure that the barrier is at least 50 cm away from the ground.

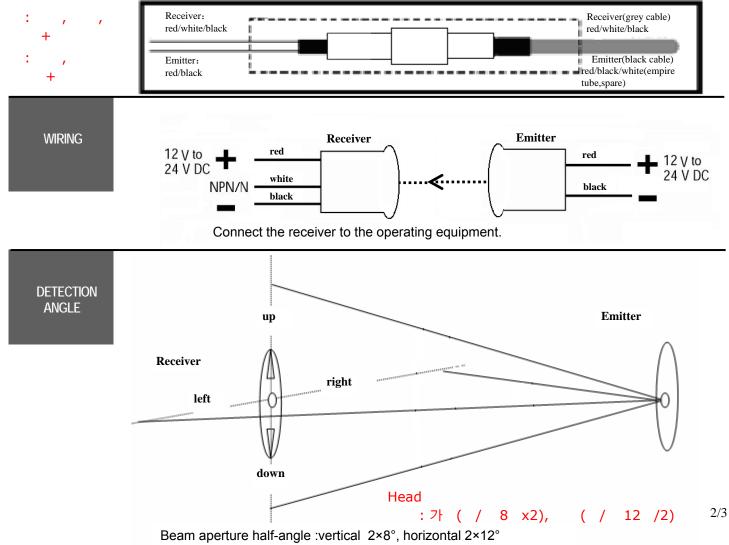


 Drill a 13 mm (or 1/2") hole in each door upright.



- Slide the heads and cables into the profiled sections.
- Make sure to reverse the direction of propagation of the beams by sliding one emitter AND one receiver into each upright.
- Check that a receiver is correctly situated opposite each emitter.

## •Connect the head and cable with the plug.



Steps to follow if the barriers doesn't function correctly :

TROUBLESHOOT ING

1. Use a voltmeter to check whether the supply voltage (12 to 24VDC(-5%+20%)in fact exists between the + and – terminals of each transmitter and each receiver.

- 2. check the wiring and components as described in the application instructions.
- Check the alignment of the transmitter with the receiver ;a tolerance vertical of 2×8° or horizontal of 2×12° is normally possible; check that the range is not excessive(it cannot exceed 5m)
- 4. Check that the lower barrier is not too near the ground(30 cm min.).
- 5. If 2 barriers are used check that they are over 50cm apart.

6. If 2 barriers are used, check that they cross properly ;there must be the transmitter of one barrier and the receiver of the other barrier in the same upright.

Check that the wiring links a transmitter with the receiver facing it.

If check 1 to 6 are positive ,place a voltmeter between the NPN or the PNP and terminals of the receiver. Check the displayed voltage according to following table:

|                     | MICROCELL SC NPN/N |
|---------------------|--------------------|
| Barrier established | 0V                 |
| Barrier interrupted | (*)                |

\*: Voltage determined by electronic input circuit of the operating equipment. 8. If test 7 is negative, the receiver or the transmitter has broken down.

9. To check the transmitter, it is practical to use a spare receiver as the test instrument. It is preferable to use an independent source of supply, for example, a 12 or 24 V DC battery connected between + and -;the NPN or PNP output may remain disconnected. Place the test receiver at a distance of about 30 cm in front of the transmitter to be tested; align it well and check the whether the test receiver's output signal changes when it is disaligned; if it does not, the transmitter has broken down and must be replaced.

10. To check the receiver, it is practical to use a spare transmitter as the test instrument. It is preferable to use an independent source of supply. For example, a 12 or 24VDC battery connected between + and -;

Before commencing the test, mask the barrier transmitter to be checked using black selfadhesive tape, for example.

Place the test transmitter about 30cm in front of the receiver to be tested; align it well and check whether the output signal of the receiver to be tested changes when the test transmitter is disaligned.

If the receiver does not function with this test barrier it has broken down and must be replaced.