**DESCRIPTION**

1. LCD  
2. radar antenna (narrow field)  
3. radar antenna (wide field)  
4. IR-curtain width adjustment  
5. IR-lenses  
6. camera  
7. cover  
8. main connector  
9. main adjustment knob  
10. IR-curtain angle adjustment knob

**ACCESSORIES**

10IMB: Bracket accessory  
10.1279: Replacement Kit

Download the BEA DECODER app for a quick overview of settings

Activation & safety sensor with camera for automatic sliding doors

UL US LISTED
1 MOUNTING & WIRING

Mounting is compatible with the WIZARD.

Sensor connectivity (power and relays) must utilize only the supplied harness.
Sensor and camera power must be supplied from a Class 2 supply source limited to 15 W.
Sensor is intended to be monitored for proper operation by the door operator or system.
Harness shall be routed separated from any Mains or non-Class 2 voltage cable for correct operation or shall be rated for the Mains voltage, and suitable protection and routing means shall be used according to National and Local Codes to prevent damage to the harness.

2 RADAR OPENING IMPULSE FIELD

The size of the detection field varies according to the mounting height of the sensor.

Voltage Regulator

CAMERA
3 INFRARED SAFETY FIELD

Activate the visible* spots to verify the position of the IR-curtain.

If necessary, adjust the IR-curtain angle (from -7° to 4°, default 0°).

Additional adjustments are possible by LCD or remote control (see p. 5)

Part of the detection field can be masked to reduce it. The arrow position determines the width of the detection field.

Always verify the actual detection field width with a piece of paper and not the Spotfinder, which detects the whole emitted field.

The size of the detection field varies according to the mounting height and the settings of the sensor. The full door width must be covered.

** The distance between the inner curtain of the inside door sensor and the inner curtain of the outside door sensor should always be smaller than 8 in.

* Visibility depends on external conditions. When spots are not visible, use the Spotfinder to locate the curtains.

4 SETUP

STEP OUT OF THE INFRARED FIELD!

SETUP 1 (QUICK)
reference picture

SETUP 2 (ASSISTED)
test of full door cycle + reference picture

TEST THE PROPER OPERATION OF THE INSTALLATION BEFORE LEAVING THE PREMISES!
HOW TO USE THE LCD?

DISPLAY DURING NORMAL FUNCTIONING

Pressing a parameter symbol on your remote control, displays the saved value directly on the LCD-screen. Do not unlock first.

FACTORY VALUE VS. SAVED VALUE

NAVIGATING IN MENUS

Select More to go to next level:
- basic settings
- advanced settings
- diagnostics

Select Back to return to previous menu or display.

CHANGING A VALUE

Select your language before entering the first LCD-menu.
During the first 30 seconds after power-on of the sensor or later in the diagnostics menu.

CHANGING A ZIP CODE

Validate the last digit in order to activate the new ZIP code:
- v = valid ZIP code, values will be changed accordingly
- x = invalid ZIP code, no values will be changed
- v/x = valid ZIP code, but from a different product.
  Only available values will be changed.

VALUE CHECK WITH REMOTE CONTROL

Pressing a parameter symbol on your remote control, displays the saved value directly on the LCD-screen. Do not unlock first.
### OVERVIEW OF SETTINGS

#### Basic Settings
- **RAD: FIELDSIZE**
  - small > > > > > > > large

- **IR: WIDTH**
  - small > > > > > > > uni

- **IR: OUTPUT**
  - DeEner/NO Energ/NC Energ/NC Energ/NC DeEner/NO

- **TEST**
  - off on

#### Advanced Settings
- **RAD: IMMUNITY**
  - low > > > > > > > high

- **RAD: DIRECTION**
  - off bi uni uni uni uni away

- **RAD: HOLDTIME**
  - 0.5 s 1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s 9 s

- **RAD: REENTRY**
  - small > > > > > > > large

- **RAD: OUTPUT**
  - DeEner/NO Energ/NC Energ/NC Energ/NC DeEner/NO

- **IR: IMMUNITY**
  - normal enhanced

- **IR: WIDTH**
  - small > > > > > > > uni

- **IR: OUTPUT**
  - DeEner/NO Energ/NC Energ/NC Energ/NC DeEner/NO

- **IR: NUMBER**
  - service mode 1

- **IR: PRESENCE TIME**
  - 30 s 1 min 2 min 5 min 10 min 20 min 60 min infinite

- **IR: FREQ**
  - A

- **IR: SPOTVIEW**
  - view of spot(s) that trigger detection

- **POWERSUPPLY**
  - supply voltage at power connector

- **OPERATINGTIME**
  - power duration since first startup

- **RESET LOG**
  - delete all saved errors

- **PASSWORD**
  - LCD and remote control password

- **ADMIN**
  - enter code to access admin mode

### Diagnostics
- **ZIP CODE**
  - all parameter settings in zipped format

- **ID #**
  - unique ID-number

- **CONFIG P/N**

- **SOFT P/N**

- **ERROR LOG**
  - last 10 errors + day indication

- **IR: SPOTVIEW**
  - view of spot(s) that trigger detection

- **IR: C1 ENERG**
  - signal amplitude received on curtain 1

- **IR: C2 ENERG**
  - signal amplitude received on curtain 2

- **POWERSUPPLY**
  - supply voltage at power connector

- **OPERATINGTIME**
  - power duration since first startup

- **RESET LOG**
  - delete all saved errors

- **PASSWORD**
  - LCD and remote control password

- **ADMIN**
  - enter code to access admin mode

### Factory Reset
- **FACTORY RESET**
  - full reset partial reset partial: outputs are not reset

### Zip Code
- all parameter settings in zipped format
(see application note on ZIP CODE)

### ID #
- unique ID-number

### Config P/N

### Soft P/N

### Error Log
- last 10 errors + day indication

### Spot View
- view of spot(s) that trigger detection

### IR: C1 Energ
- signal amplitude received on curtain 1

### IR: C2 Energ
- signal amplitude received on curtain 2

### Power Supply
- supply voltage at power connector

### Operating Time
- power duration since first startup

### Reset Log
- delete all saved errors

### Password
- LCD and remote control password
(0000 = no password)

### Admin Code
- enter code to access admin mode
## Troubleshooting

<table>
<thead>
<tr>
<th>E1</th>
<th>ORANGE LED flashes 1 x.</th>
<th>The sensor signals an internal fault.</th>
<th>1</th>
<th>Replace sensor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2</td>
<td>ORANGE LED flashes 2 x.</td>
<td>The power supply is too low or too high.</td>
<td>1</td>
<td>Check power supply (in the diagnostics menu of the LCD).&lt;br&gt;2</td>
</tr>
<tr>
<td>E4</td>
<td>ORANGE LED flashes 4 x.</td>
<td>The sensor receives not enough IR-energy.</td>
<td>1</td>
<td>Decrease the angle of the IR-curtains.&lt;br&gt;2</td>
</tr>
<tr>
<td>E5</td>
<td>ORANGE LED flashes 5 x.</td>
<td>The sensor receives too much IR-energy.</td>
<td>1</td>
<td>Slightly increase the angle of the IR-curtains.&lt;br&gt;2</td>
</tr>
<tr>
<td>E8</td>
<td>ORANGE LED flashes 8 x.</td>
<td>IR power emitter is faulty.</td>
<td>1</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td>ORANGE LED is on.</td>
<td>The sensor encounters a memory problem.</td>
<td>1</td>
<td>Cut and restore power supply.&lt;br&gt;2</td>
<td>If orange LED lights up again, replace sensor.</td>
</tr>
<tr>
<td>RED LED flashes quickly after an assisted setup.</td>
<td>The sensor sees the door during the assisted setup.</td>
<td>1</td>
<td>Move the IR-curtains away from the door.&lt;br&gt;2</td>
<td>Install the sensor as close to the door as possible. If needed, use a bracket accessory.&lt;br&gt;3</td>
</tr>
<tr>
<td>RED LED lights up sporadically.</td>
<td>The sensor vibrates.</td>
<td>1</td>
<td>Check if the sensor is fastened firmly.&lt;br&gt;2</td>
<td>Check position of cable and cover.</td>
</tr>
<tr>
<td>The sensor sees the door.</td>
<td>The sensor is disturbed by external conditions.</td>
<td>1</td>
<td>Increase the IR-immunity filter.</td>
<td></td>
</tr>
<tr>
<td>GREEN LED lights up sporadically.</td>
<td>The sensor is disturbed by rain and/or leaves.</td>
<td>1</td>
<td>Increase radar-immunity filter.</td>
<td></td>
</tr>
<tr>
<td>Ghosting created by door movement.</td>
<td>The sensor vibrates.</td>
<td>1</td>
<td>Change radar field angle.</td>
<td></td>
</tr>
<tr>
<td>The sensor sees the door or other moving objects.</td>
<td>The sensor is protected by a password.</td>
<td>1</td>
<td>Enter the right password. If you forgot the code, cut and restore the power supply to access the sensor without entering a password during 1 minute.</td>
<td></td>
</tr>
</tbody>
</table>

- IXIO sensors are intended to be used with pedestrian sliding door systems.
- This device can be expected to comply with Part 15 of the FCC Rules provided it is assembled in exact accordance with the instructions provided with this kit. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.
**INSTALLATION**

- Do not cover the sensor.
- Avoid moving objects and light sources in the detection field.
- Avoid highly reflective objects in the infrared field.

**MAINTENANCE**

- It is recommended to clean the optical parts at least once a year or more if required due to environmental conditions.
- Do not use aggressive products to clean the optical parts.

**SAFETY**

- The door control unit and the door cover profile must be correctly earthed.
- Only trained and qualified personnel may install and setup the sensor.
- Always test the proper operation of the installation before leaving the premises.
- The warranty is invalid if unauthorized repairs are made or attempted by unauthorized personnel.

**LED-SIGNAL**

- Motion detection
- Presence detection
- LED flashes
- LED flashes x times
- LED flashes red-green
- LED flashes quickly
- LED is off

**WARNING**

- The device cannot be used for purposes other than its intended use. All other uses cannot be guaranteed by the manufacturer of the sensor.
- The manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety.
- The manufacturer of the sensor cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.
**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>12 V - 24 V AC +/-10%; 12 V - 30 V DC +/-10%</td>
</tr>
<tr>
<td>(to be operated from SELV compatible</td>
<td></td>
</tr>
<tr>
<td>power supplies only)</td>
<td></td>
</tr>
<tr>
<td>Power consumption:</td>
<td>&lt; 2.5 W</td>
</tr>
<tr>
<td>Mounting height:</td>
<td>6.5 ft to 11.5 ft</td>
</tr>
<tr>
<td>(local regulations may have an impact</td>
<td></td>
</tr>
<tr>
<td>on the acceptable mounting height)</td>
<td></td>
</tr>
<tr>
<td>Temperature range:</td>
<td>-13°F to +131°F; 0-95% relative humidity,</td>
</tr>
<tr>
<td>non condensing</td>
<td></td>
</tr>
<tr>
<td>Degree of protection:</td>
<td>IP54</td>
</tr>
<tr>
<td>Noise:</td>
<td>&lt; 70 dB</td>
</tr>
<tr>
<td>Expected lifetime:</td>
<td>20 years</td>
</tr>
<tr>
<td>Applicable directives:</td>
<td>R&amp;TTE 1999/5/EC; MD 2006/42/EC; LVD 2006/95/EC;</td>
</tr>
<tr>
<td></td>
<td>ROHS 2 2011/65/EU</td>
</tr>
</tbody>
</table>

**Detection mode:**
- **Motion**: Min. detection speed: 2 in/s
- **Presence**: Typical response time: < 200 ms (max. 500 ms)

**Technology:**
- **Microwave doppler radar**
- **Transmitter frequency**: 24.150 GHz
- **Transmitter radiated power**: < 20 dBm EIRP
- **Transmitter power density**: < 5 mW/cm²

**Active infrared with background analysis**
- **Spot**: 2 in x 2 in (typ)
- **Number of spots**: max. 24 per curtain
- **Number of curtains**: 2

**Output:**
- **Electro-mechanical-relay (potential and polarity free)**
- **Max. contact current**: 1 A
- **Max. contact voltage**: 30 V DC
- **Adjustable Holdtime**: 0.5 to 9 s

**Solid-state-relay (potential and polarity free)**
- **Max. contact current**: 400 mA
- **Max. contact voltage**: 42 V AC/DC
- **Holdtime**: 0.3 to 1 s

**Test input:**
- **Sensitivity**: Low: < 1 V; High: > 10 V (max. 30 V)
- **Response time on test request**: typical: < 5 ms

**Norm conformity:**
- **EN 12978**
- **EN ISO 13849-1:2008 PL <ex> CAT. 2**
- **(under the condition that the door control system monitors the sensor at least once per door cycle)**
- **IEC 61496-1:2012 ESPE Type 2**
- **EN 16005:2012 Chapter 4.6.8; DIN 18650-1:2010 Chapter 5.7.4**
- **BS 7036-1:1996 Chapter 8.1**

Specifications are subject to changes without prior notice.
All values measured in specific conditions.

**TECHNICAL SPECIFICATIONS (CAMERA)**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage Regulator</td>
<td>6.6 - 36 VDC (+/- 10%); 6 - 28 VAC (+/- 10%)</td>
</tr>
<tr>
<td>(built into wire harness)</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-30° to 60° C (RH 95% max)</td>
</tr>
<tr>
<td>Video Output</td>
<td>1.0 (Vp-p) / 75Ω</td>
</tr>
<tr>
<td>Image Sensor</td>
<td>CMOS</td>
</tr>
<tr>
<td>Horizontal Resolution</td>
<td>480 TVL</td>
</tr>
<tr>
<td>NTSC Output</td>
<td>720 (H) x 480 (V)</td>
</tr>
<tr>
<td>Sync System</td>
<td>Inter-Sync</td>
</tr>
</tbody>
</table>

| Frame Rate                           | 30 fps                                     |
| Minimum Illumination                 | 0.01 LUX                                    |
| AE Control                           | Auto                                       |
| Gain Control                         | Auto                                       |
| Electronic Shutter                   | 1 s ~ 1/10,000 s                           |
| S/N Ratio                            | >50 dB                                     |
| AWB                                  | Auto                                       |

**ANSI / AAADM Compliance**

Upon completion of the installation or service work, at a minimum, perform a daily safety check in accordance with the minimum inspection guidelines provided by AAADM. Provide each equipment owner with an owner’s manual that includes a daily safety checklist and contains, at a minimum, the information recommended by AAADM. Offer an information session with the equipment owner explaining how to perform daily inspections and point out the location of power/operation switches to disable the equipment if a compliance issue is noted. The equipment should be inspected annually in accordance with the minimum inspection guidelines. A safety check that includes, at a minimum, the items listed on the safety information label must be performed during each service call. If you are not an AAADM certified inspector, BEA strongly recommends you have an AAADM certified inspector perform an AAADM inspection and place a valid inspection sticker below the safety information label prior to putting the equipment into operation.