

## IS75 Beacon Module

### System overview

The NurseCall system can optionally be delivered with the locating function. The IS75 Person Detection Beacon can be installed on doors or corridors in the building that you want to supervise. When passing an IS75 Beacon, S37L Wristband Transmitters refresh their actual position. At alarm triggering, S37L Transmitters send the identification and the position of the last passed beacon (where the alarm was triggered).

At the arrival of a call, the information of the actual position is indicated additionally on the NurseCall units. This information can be made visible by pressing the yellow button on the NurseCall Main and Relay Units.

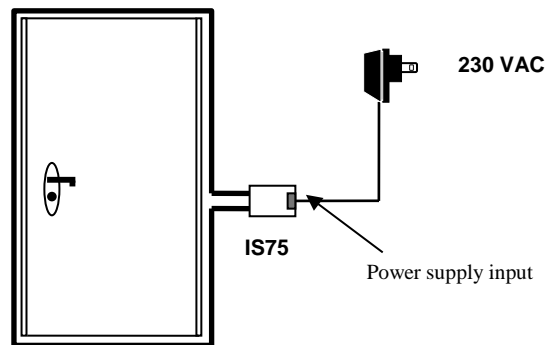
The locating information block has the following aspect:

HELP	A03
POS: 077	ID: 0777

255 positions (POS: 000 - 254) can be differentiated. When passing IS75 Beacons with position numbers 231 – 254, S37L Transmitters can send a call for help automatically without any manual triggering. This can be used in case of wandering patients.

### Description

The IS75 Person Detection Beacon is powered by an external power supply. A 230 VAC socket needs to be available near the area where you want to place the IS75 Beacon. Around the door or the corridor, a beacon wire must be installed.



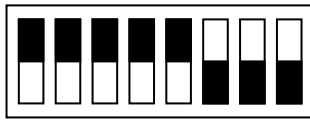
### **8-position DIP switch to select the position number**

When passing the beacon, S37L Transmitters read the position number of the IS75 Beacon. This position number can be set internally by a DIP switch inside the IS75.

- Position 1: add 128
- Position 2: add 64
- Position 3: add 32
- Position 4: add 16
- Position 5: add 8
- Position 6: add 4
- Position 7: add 2
- Position 8: add 1

Example :

ON



OFF

The position number in this example is:  $1 \times 128 + 1 \times 64 + 1 \times 32 + 1 \times 16 + 1 \times 8 + 0 \times 4 + 0 \times 2 + 0 \times 1 = 248$

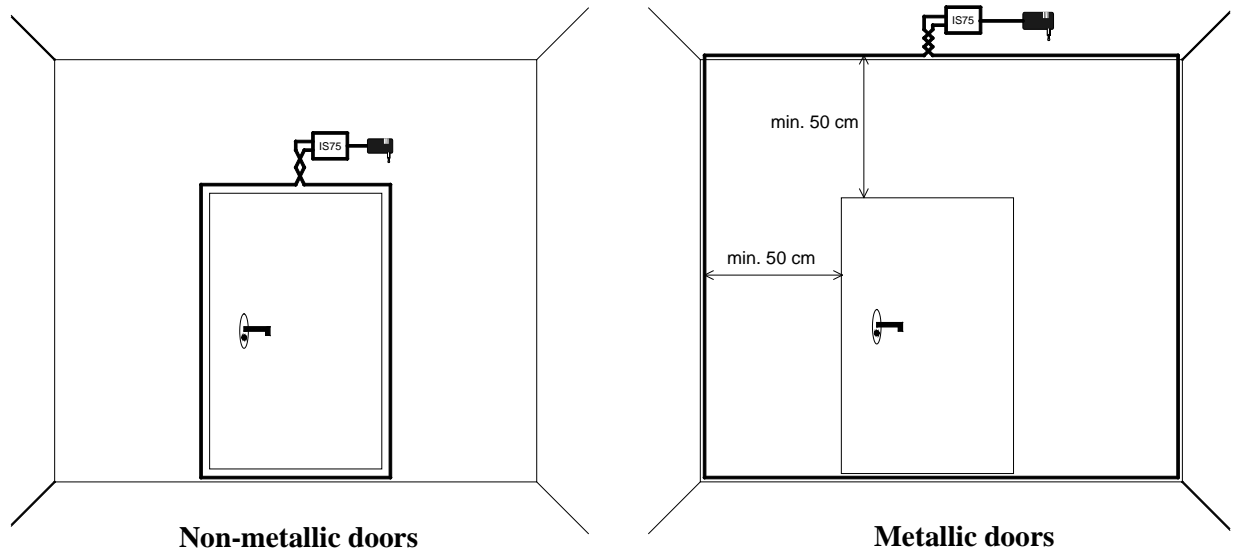
Notice: position numbers 21 and 42 cannot be used!

### **Installation recommendations**

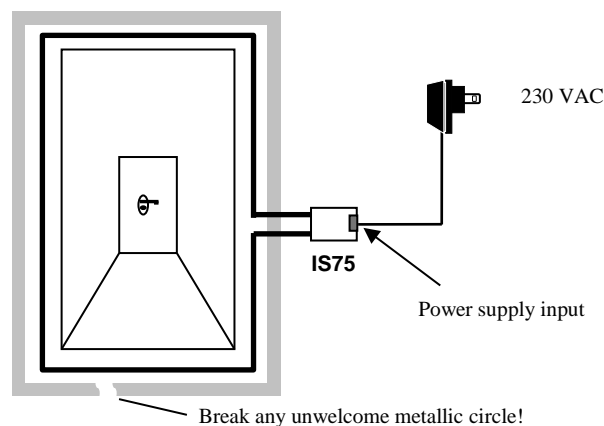
- Do not install the IS75 Beacon in direct sunlight or in a poorly ventilated room.
- Use a cable of diameter 0,5 mm or 1 mm.
- Do not use a shielded cable for the loop.
- The distance between the door and the IS75 Beacon should be between 0 and 4 m. The closer the IS75 Beacon is to the door, the better it will work.
- Twist the two wires between the door/corridor and the IS75 Beacon.
- Two IS75 Beacons installed close to each other should be placed at a minimum distance of 4 m.

## Installation procedure

- When using on doors, perform one loop.  
Typical dimensions are width: 1 m to 1,5 m and height: 2 m.
- **Do not use on metallic doors.** If no alternative is possible, place the loop at a minimum distance of 0,5 m from metallic doors:

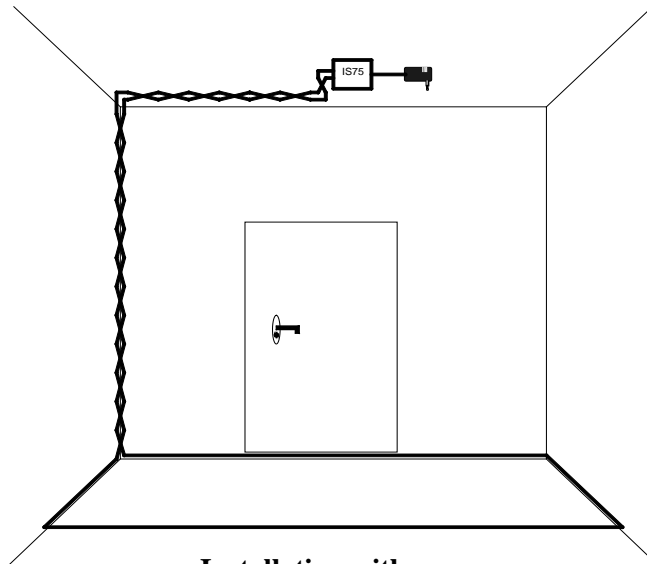


- Avoid additional closed metallic circles near the loop. Metallic parts can be close to the loop, but they should not build a closed circle (for example: a metallic frame).  
If so, break the circle:

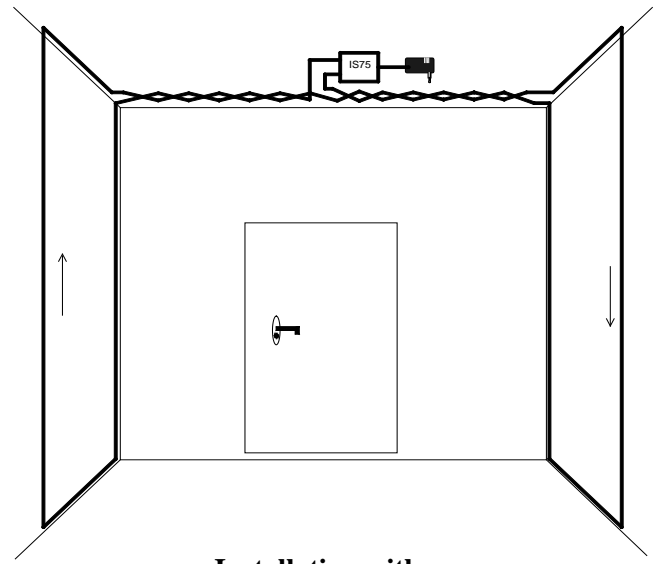


- If unwelcome metallic circles cannot be broken, use **two loops** around the door.
- In case the potentiometer of the IS75 is adjusted to a medium voltage output (middle setting of the potentiometer), use a loop with a **minimum surface of 3 m<sup>2</sup>**, for example 2 m x 1,5 m. Otherwise, the IS75 will switch off due to overheating.

- The person carrying an S37L Transmitter must normally go through the door loop to be detected. However, the loop can be placed alternatively on the floor or on walls. In these cases, take care to use a loop surface equivalent to a door size:



**Installation with  
a loop on the floor**



**Installation with  
two loops on walls**

### **Check the installation**

- Check the LED on the top of the housing. The LED must be **green** to indicate that the unit is ready to function.
- 24 hours after installation, check that the LED is **green**. If the LED is switched off, it means that too much current or voltage creates overheating of the IS75. In this case, check that the installation procedure is respected.
- Test the field by approaching with an S37L Transmitter.
  - > The position number coded with the DIP switch should be between 231 and 254.
  - > Approach an S37L Transmitter.
  - > The LED of the S37L Transmitter lights up when it detects the electromagnetic field.
  - > The detection range should be 1,5 m to 2,5 m in front of the loop.

### **Technical characteristics:**

- Power supply: 12 VDC, 450 mA switching power supply block
- Fundamental transmission frequency: 67 kHz
- Modulation bandwidth (stated frequency band): 9 kHz – 135 kHz
- Inductive loop coil transmitter with antenna area: between 2 m<sup>2</sup> and 30 m<sup>2</sup>