



IS75 Beacon Module

General:

The NurseCall system can optionally be delivered with the “Locator” function. Beacon modules IS75 need to be installed on doors or corridors in the building you want to supervise. When passing one of these modules the transmitters S37L (wristband type transmitter) refresh the actual position. At alarm triggering, the transmitters S37L do not only transmit the identification (who sent the alarm), but also the position of the last passed module (where was the alarm 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 units: NurseCall Main- and Relay Unit.

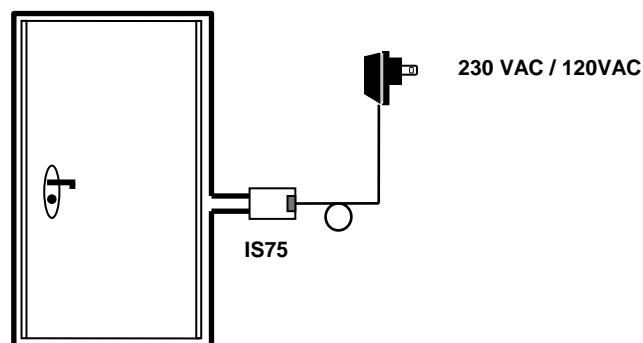
“Locator” information block:

HELP	A03
POS: 077	

255 positions (POS: 000 - 254) can be differentiated. When passing beacon modules with position numbers 230 - 254 the transmitters S37L can send a call for help automatically without manual activation (wandering). Fixed transmitters N46 are always indicated with the position 000.

IS75 modules:

The beacon modules IS75 are powered by an external power supply. A 230 VAC socket (US: 120 VAC socket) needs to be available near the spot you want to place the module. Around the door or the corridor must be installed a beacon wire.

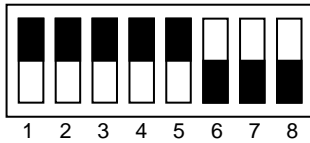


When passing the beacon, the transmitters S37L read the position number of the module IS75. This position number can internally be set by a dip switch inside the IS75.



8-position DIP switch inside the IS75 to select the position number:

ON



Position 1: add 128

Position 2: add 64

Position 3: add 32

Position 4: add 16

Position 5: add 8

Position 6: add 4

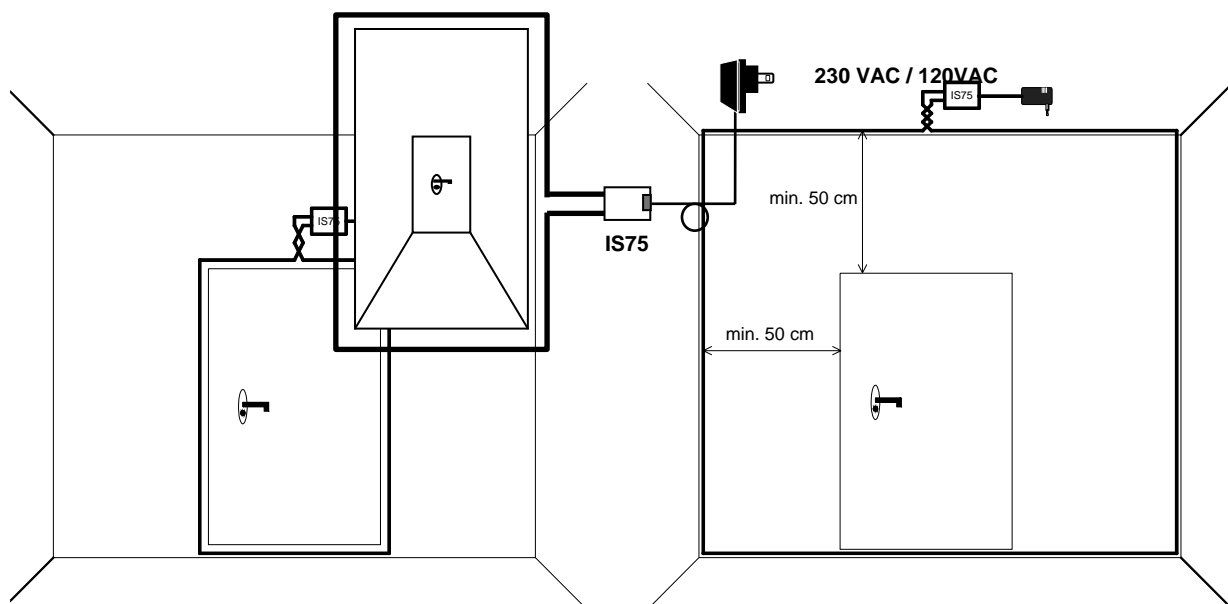
Position 7: add 2

Position 8: add 1

→ Example above : $1 \times 128 + 1 \times 64 + 1 \times 32 + 1 \times 16 + 1 \times 8 + 0 \times 4 + 0 \times 2 + 0 \times 1 = 248$

Installation hints:

- Check the LED on the top of the housing. The LED must be on (green) to indicate that the unit is ready to function.
- Do not install the beacon module in exposed sunlight or where there is poor air circulation.
- Normally perform ONE loop when using on doors (width dimensions typ. 1m – 1.5m)
- Do not use on metallic doors. If no alternative exists, distance the loop at least 0,5 meter from metallic doors.

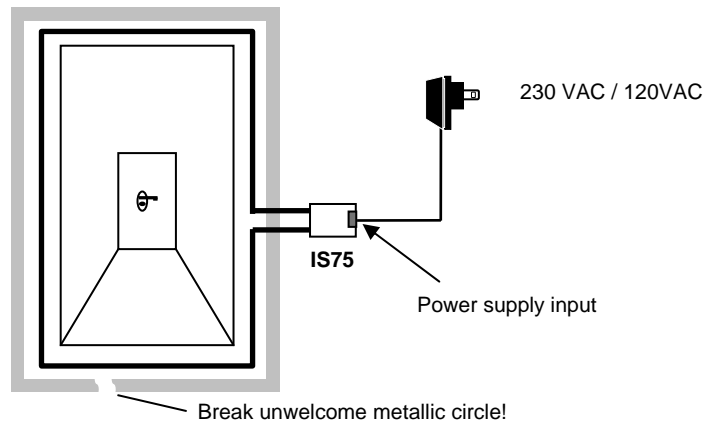


Not metallic doors

Metallic doors



- Take care NOT to have additional closed metallic circles in the proximity of the loop. There can be metal parts close to the loop, but they should NOT build a closed circle (for example: metal frame building a closed circle). If they do, break the circle.



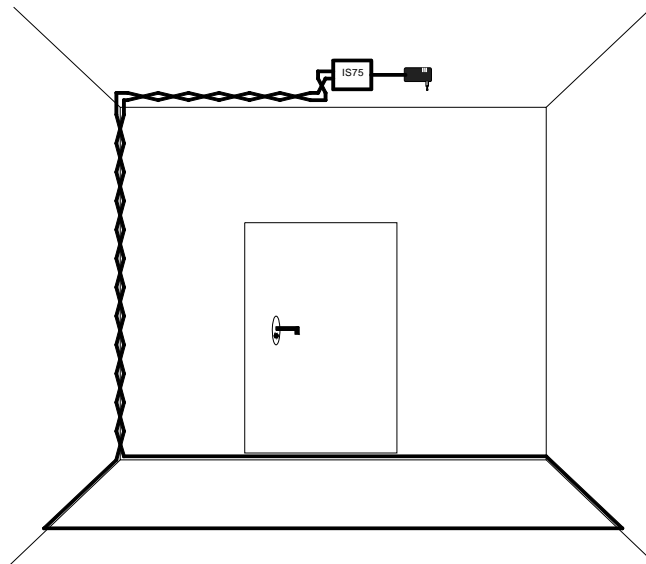
Attention: If the unwelcome metallic circle cannot be broken, it is recommended to use TWO loops around the door.

After installation the voltage measured at the power supply input of the IS75 shall NOT be below 11,5 V DC. If the voltage is below 11,5 V DC, this indicates that there are unwelcome metallic circles in the proximity. In this case, you need to use a second loop around the door.

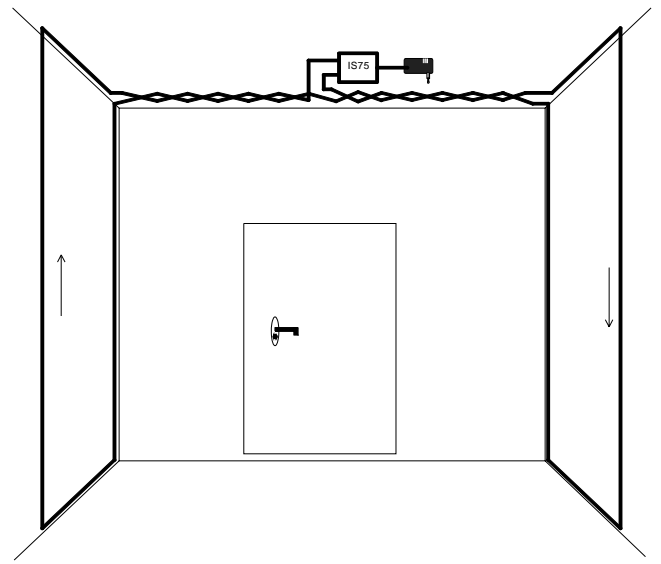
The voltage can be measured at the inner two wires of the RJ11 connector (in the middle).



- The cable to use is not critical, diameter of 0,5 mm or 1 mm is o.k.
- Do not use shielded cable for the loop.
- The distance between the door and the beacon transmitter itself should be 0 – 4 meters (the closer the better).
- Take care to twist the two wires between the door/corridor and the beacon transmitter itself.
- You can test the field by approaching with a S37L transmitter. The LED lights up red whenever the S37L detects the entry into the electromagnetic field. The detection range should be around 1,5 to 2,5 m in front of the loop.
- The person must normally pass through the door loop to be detected. In some cases, you can put the loop on the floor/ loops on side walls. In these cases, take care to use a loop surface equivalent to a door size.



Loop on the floor



Two loops on side walls

- Two different beacon modules should have a distance of at least 3-4 m meters from each other.

Technical characteristics:

- Power supply: 12 VDC, 300 mA power supply block
- Fundamental transmission frequency: 67 kHz
- Modulation bandwidth (stated frequency band): 9 kHz – 135 kHz
- Inductive loop coil transmitter with antenna area < 30 m²
- Loop coil length < 15m
- Product Class 2
- Duty Cycle Class 4
- Power Class 3