# Transponder reader

## Description

The transponder reader is a device that activates when the appropriate badge is laced in front of it (1-2 cm). The badge is the transponder. The signal generated by placing the badge near the reader will then be transferred through the BUS (BUS cable, item 492 31). The transponder reader is installed as part of a wired burglar alarm system, and works as a standard connector. It will therefore be connected to the BUS cable, just like any other burglar alarm device. Differently from the remote control item 0675 17, the transponder does not need a power battery. Compared with traditional remote control, the ¨transponder reader/transponder¨ system guarantees better security, due to its code crypting system. In addition, the possibility of memorising up to 50 badges (depending on the control unit used), it ensures a higher degree of system management, particularly in those environments (companies, offices, shops), where the number of people needing access can be high.

## Technical data

Power supply from SCS BUS:    18 – 27 Vdc
Max absorption from:          12 mA
Operating temperature:        4 – 40 °C

## Dimensional data

Size:    2 flush-mounting modules
Depth: 20.7 mm
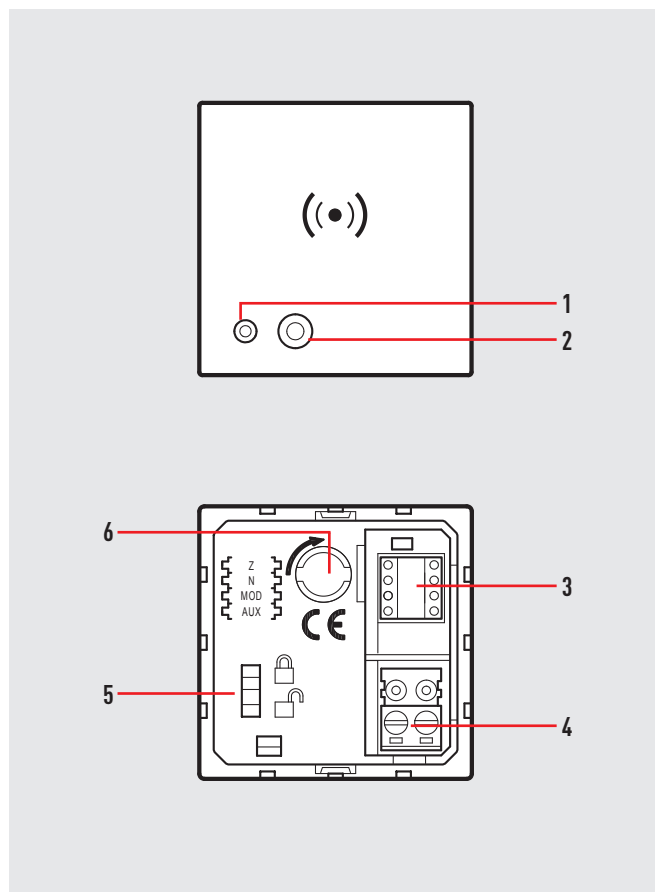


## Legend

1. Notification and system diagnostic three-colour LED:
   -OFF LED (system ON)
   -Flashing reen LED (system OFF)
   -Flashing green LED (wrong enabling)
   -Red LED (alarmed system)
   -Flashing red LED (siren battery exhausted)
   -Orange LED (disabling after alarm)

2. Reset pushbutton (not active in Burglar Alarm operation)

3. Configurator housing

4. Plug-in terminal for the BUS-SCS connection

5. Programming micro-switch (not active in Burglar Alarm operation)

6. Housing for anti-tamper device

## Configuration

**BURGLAR ALARM Mode:**
The transponder reader used as burglar alarm system arming/disarming device must be assigned to the connector group. It therefore requires allocation of the relevant ¨group¨ number (see below), and of the progressive device number within the ¨group¨.

**Z**
This configurator assigns the number of the zone it belongs to within the group of devices (any free zone within the system). To configure it as belonging to the connectors group, no configurator needs to be connected. On the other hand, configurators 1 to 8 assign the zone of the transponder reader within the sensors ¨group¨ (IR detectors or contact interface), while configurator 9 assigns it to the ¨group¨ of the auxiliary devices (auxiliary channel interface or relay actuator).

**N**
This configurator assigns the progressive number of the transponder reader inside the allocated zone. Configurator 1 identifies the first transponder reader, configurator 2 identifies the second one, and so on, up to a maximum of 9 receiving devices for each zone.

**MOD**
Insert configurator number 0
The transponder is saved in the burglar alarm control unit
The maximum number of transponders is 50 with display control unit, 573935

**NOTE:** if all permitted devices have already been connected in the connector group, a value between 1 and 9 may be assigned to configurator Z (zone it belongs to), taking into account the progressive number.

**NIGHT FUNCTION:** With the system disarmed, it is possible to activate the zones up to that with the numeric value of the configurator connected in the AUX position. This function is enabled by connecting configurator 7 to the MOD position.

**EXAMPLE: MOD = 7, AUX = 3**
In this case, when the burglar alarm system with control unit and dialling device is activated, only the first three zones will be active.

**AUX**
This configurator activates the own connector auxiliary operating modes, assigning an auxiliary channel.

**EXAMPLE**
configured in this way, the transponder reader operates as the 4th device of the connector group.

| Configurator position | Value |
|---|---|
| Z | none |
| N | 4 |
| MOD | 1 |
| AUX | none |

**AUTOMATION mode - TIMED ON/OFF:**
It enables a 1 second ON/OFF control to be performed.

**Z**
This configurator coincides with A, Automation system environment (it assigns the homogeneous environment where the activation is performed from 1 to 9)

**N**
It corresponds to PL of the Automation system (it assigns the location from where activation must be performed - from1 to 9 -)

**MOD**
It assigns the operating mode. For the Automation function connect configurator 2

**AUX**
No configurator

**EXAMPLE**
If Z=3, N=2, MOD=2, the device sends a 1 second ON/OFF control (e.g. opening of an electric door lock) to an actuator with address A=3 and PL=2.

| Configurator position | Value |
|---|---|
| Z | 3 |
| N | 2 |
| MOD | 2 |
| AUX | none |

## AUTOMATION – SCENARIOS MANAGEMENT mode:

**Z**
It corresponds to the 035 51 scenario module environment where the actuation is performed - from 0 to 9 - (refer to housing A in the scenario module).

**N**
It corresponds to the PL position (configurator from 1 to 9) of the scenario module.

**MOD**
It assigns the operating mode. For the Automation functions connect configurator 2.

**AUX**
It assigns the correspondence with the required scenario to the scenario module. The configurators that can be used are those between 1 and 9, that coincide with the corresponding scenario of the scenario module 035 51.

### EXAMPLE
when configured in this way the control activates scenario no. 4 of the scenario module 035 51 with address A=3, PL=2.

| Configurator position Transponder reader | Value |
|---|---|
| Z | 3 |
| N | 2 |
| MOD | 2 |
| AUX | 4 |

| Configurator position Scenario module | Value |
|---|---|
| A | 3 |
| PL | 2 |

## AUTOMATION – TIMED CONTROL mode:
It enables to performs a timed ON control

**Z**
This configurator coincides with A, Automation system environment (it assigns the homogeneous environment where the activation is performed - from 1 to 9 -)

**No.**
It corresponds to PL of the Automation system (it assigns the location from where activation must be performed  from1 to 9)

**MOD**
It assigns the operating mode. For timed ON controls connect configurator 6

**AUX**
It assigns the timer duration based on the value of the configurator used, as shown in the following table

| AUX | Time |
|---|---|
| 0 | |
| 1 | 1 min |
| 2 | 2 min |
| 3 | 3 min |
| 4 | 4 min |
| 5 | 5 min |
| 6 | 15 min |
| 7 | 30 s |
| 8 | 0,5 s |
| 9 (not used) | – |

### EXAMPLE
Configured in this way, the transponder reader sends a 5 min. timed ON control (e.g. to switch on a service light) to an actuator with address A=1 and PL=3

| Configurator position | Value |
|---|---|
| Z | 1 |
| N | 3 |
| MOD | 6 |
| AUX | 5 |

### AUTOMATION – AUXILIARY CONTROLS mode:

This mode may be obtained by connecting an AUX configurator to MOD. This will generate a 1 second ON/OFF control on the assigned auxiliary channel. The difference compared with the auxiliary function generated with the reader connected to the Burglar Alarm system (MOD=1), is that in this case the codes of the transponders are saved in the reader itself, with the possibility of managing up to 120 badges at the same time.

#### Z
It assigns the zone it belongs to, from 0 to 9

#### No.
It assigns the progressive number within the zone

#### MOD
It assigns the operating mode. For the auxiliary functions connect the AUX configurator.

#### AUX
It assigns the auxiliary channel

### EXAMPLE

with the control configured in this way, as auxiliary device no. 1 (N=1) in zone 3 (Z=3), the control sends and ON/OFF control through auxiliary channel 2 (AUX=2), intended for the relay actuator, item 5739 42 or 5739 43 configured with AUX = 2.

| Configurator position Transponder reader | Value |
| --- | --- |
| Z | 3 |
| N | 1 |
| MOD | AUX |
| AUX | 2 |

| Configurator position Relay actuator | Value |
| --- | --- |
| N | 1 |
| MOD | 2 |
| AUX | 6 |

### SLAVE control

It can be used for the repetition of a control enabled on a "MASTER" transponder reader. The transponder keys used must be saved only in the "Master" device.

#### Z
It corresponds to configurator Z of the master device.

#### N
It corresponds with configurator No. of the master device

#### MOD
It assigns the operating mode. To obtain SLAVE devices connect configurator SLA

#### AUX
It coincides with configurator AUX of the master device

### Programming the transponder for automation functions

Programming the transponders (badges) is a very simple operation, allowing to save a code in the transponder reader. In this case, up to 120 codes can be saved. The procedure described below should be followed also when transponders are added.

1. Move the slide located on the rear part of the reader to the ⌂ position
2. Press the ¨PROG¨ key on the front part of the product for 5 seconds: the red LED will switch on (fixed light) and the buzzer with emit 1 BEEP. Release the key.



1 BIP
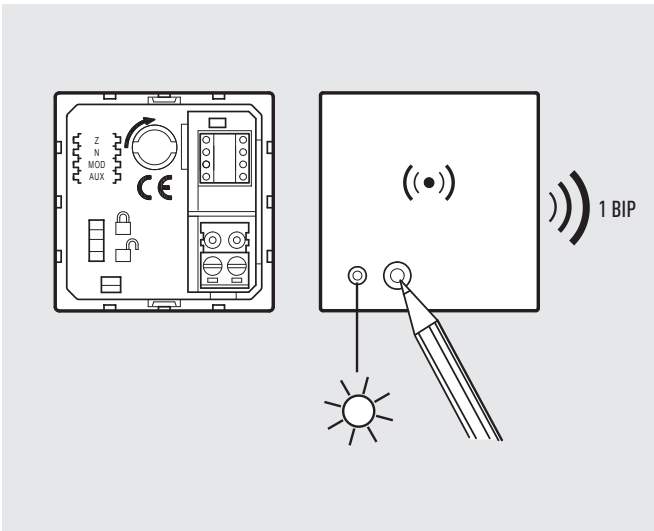
3. Now move the badges close to the transponder reader.



2 slow BEEPs
(1/2 sec.)

Transponder
**L1 legrand**
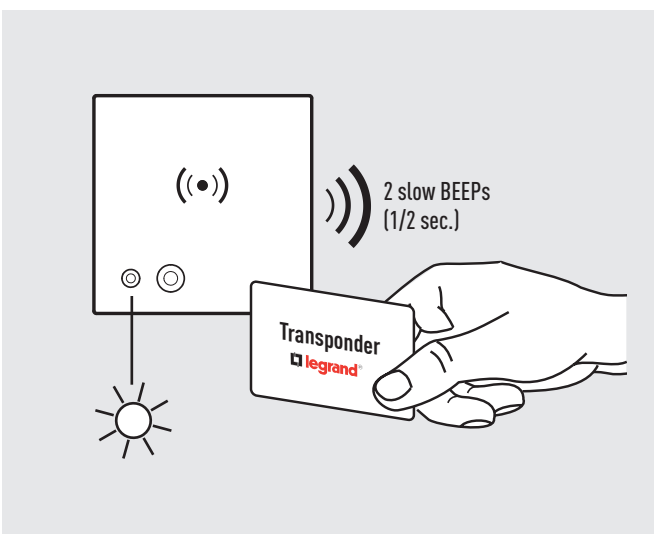
4. Make sure that two short, slow sounds have been emitted (half a second should elapse between the first BEEP and the second) and that the red LED has flashed twice. The badge has been saved.

NOTE: If the two BEEPS are fast (250 m sec between the first and the second), and the red LED flashes at the same time, this means that the badge is already present in the memory.

5. Repeat operations 3 and 4 for all available badges.

6. At the end of programming, move the rear slide back to the 🔒 position.

NOTE:
- if during the programming procedure the reader emits 5 BEEPS and the red LED flashes 5 times quickly (250 m sec between each flash), this means that the memory is full.
No other transponders can be added.
- if 30 seconds elapse after pressing the PROG key (see paragraph 2 above) without any operation being performed, the reader will exit the programming mode;
- the procedure described above can also be followed to add other transponders to the ones already saved.

### Deleting saved transponders

1. carry out operations 1 and 2 of the programming procedure;

2. press the PROG key for another 5 seconds. 4 BEEPS and the red LED flashing 4 times will indicate that ALL saved transponders HAVE BEEN DELETED;

3. press the PROG key for another 5 seconds. 4 BEEPS and the red LED flashing 4 times will indicate that ALL saved transponders HAVE BEEN DELETED;

4. alternatively, stop the procedure by moving the rear slide to the 🔒 position.