Contents

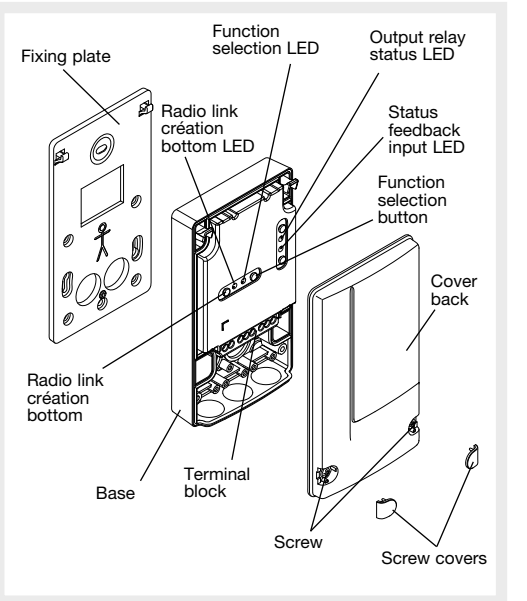
1. Introduction

The external receiver is used to remotely control an electrical appliance from inside or outside the premises. There are 2 external receiver versions:

Product reference	Supply voltage	Output
SA706AX	230 V AC	voltage-free dry contact
SA707AX	12-30 V AC of DC	voltage-free dry contact

The radio link creation and function selection LEDs, which can only be seen when the box is open, provide visual assistance when creating the link.
The output relay status LED indicates the relay status:
- LED on: activated,
- LED off: de-activated.

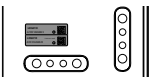
The status feedback input LED indicates the status of the controlled device:
- LED on: position contact closed,
- LED off: position contact open.



2. Preparation

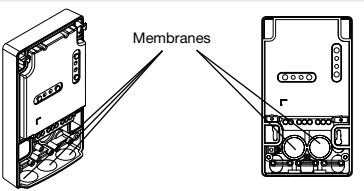
1. Lift up the cover.

2. Detach the removable pre-cut section of the guarantee sticker, and stick it on to the guarantee extension request. If you are adding to an existing system, stick the guarantee sticker on to the extension request supplied with the product.

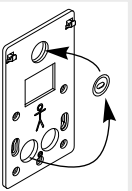


3. Remove the fixing plate from the base by sliding it downwards.

4. Using a sharp object (pen nib, screw, rigid copper wire) punch through the membranes to make holes for the cables.



5. Remove the fixing plate washer and position it at the top of the plate as shown.



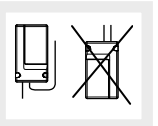
6. Draw a cable up to where the external receiver is to be located.

7. Remove about 40 mm of cable sheath then strip each conductor along 8 to 10 mm.

IMPORTANT
- **To guarantee tight fitting:**
  - **make the hole as small as possible (this can be done using a needle),**
  - **if several conductors need to be threaded through the hole these should be bunched together to form a cylindrical cross-section (10 mm maximum Ø).**
- **The maximum conductor diameter must be between 2.5 mm² (or 4 mm² for the earth connection).**

3. Installation

3.1 Choosing the best place



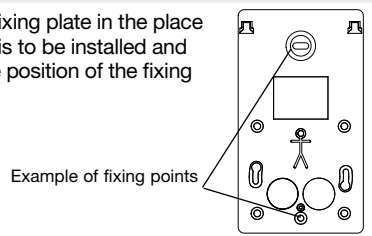
The external receiver must be placed with the cables pointing downwards and according to the standard fixing method for outside installation.

The external receiver must not be placed:

- directly on a metal wall,
- less than 1 metre away from a water pipe,
- too close to the appliance to be controlled if it is likely to generate interference (neon lighting, etc.).

3.2 Standard fixing method

1. Put the fixing plate in the place where it is to be installed and mark the position of the fixing points.

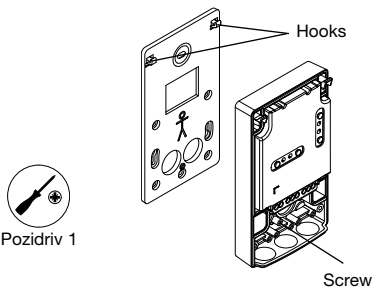


2. Drill the holes with a 6 mm Ø drill bit.

3. Fix the plate using the appropriate wall plugs and screws.

4. Adjust verticality using the washer.

5. Hook the base of the external receiver on to the fixing plate and fasten it in position using the screw provided (bag).



3.3 Fixing the receiver on a wall box (for inside installation only)

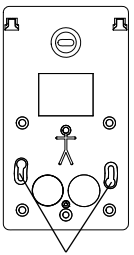
IMPORTANT: Switch off the mains 230 V power supply before carrying out work on the electrical system.

Risk of electric shock

1. Thread the cables through the holes in the plate and then through the holes in the base membranes.

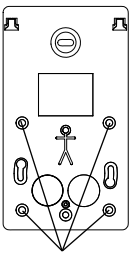
2. Fix the plate in position using the box screws:

for a Ø 60 mm box



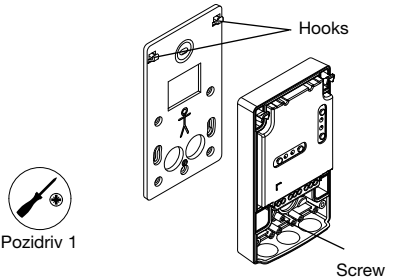
Fixing points

for a Ø 85 mm box



Fixing points

3. Hook the base of the external receiver on to the fixing plate and fix it in place using the screw provided in a bag together with the set of accessories.



IMPORTANT: In order to save space, the base can be fixed in place without the fixing plate. In this case, only 2 fixing points for a Ø 60 mm box are accessible.

3.4 Connecting the receiver

IMPORTANT

- **For controlling class 1 type devices (appliances requiring earthing), make sure the device to be controlled is earthed.**
- **The mains power supply must be switched off when performing connection operations and applicable electrical standards must be complied with.**
- **In compliance with electrical standards, the conductors in an electrical installation must be identified by a colour code:**
  - **phase: any colour except light blue, green, yellow or green/yellow,**
  - **neutral: light blue,**
  - **earth: green/yellow**
- **The maximum conductor diameter for connection to the terminal block is 2.5 mm² (or 2 x 1.5 mm² for additional connections) and 2 x 4 mm² for the earthing connection.**
- **Switch off the mains 230 V power supply before carrying out work on the electrical system.**

Risk of electric shock

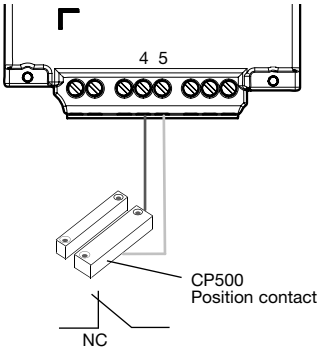
1. Thread the cables through the membranes if this has not already been done.

2. Connect the cables as shown in the following diagram:

Status feedback wiring

This wiring is necessary for the status of the controlled device to be fed back and displayed on the intercom handset for example.

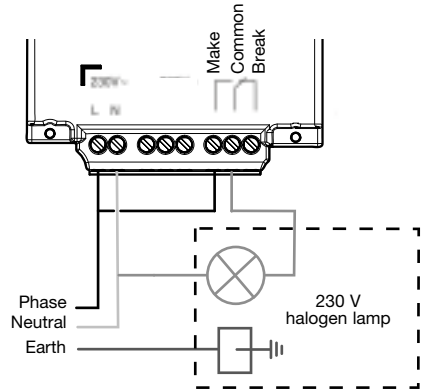
Max. cable length for a 1.5 mm² cross-section: 50 m.



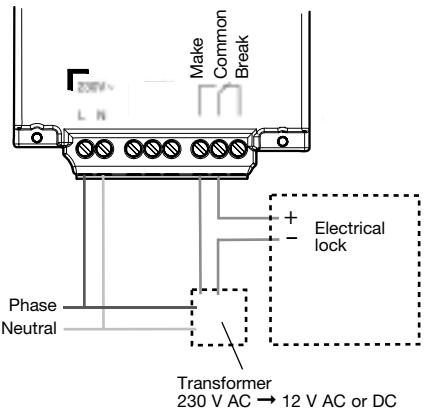
IMPORTANT: for the information feedback to be properly managed, the position contact must be wired and be in closed position before the radio link is established.

SA706AX external receiver (230 V/dry contact

Example with connection to external lighting (class 1 type appliance)



Example with connection to an electrical lock (Normally Open dry contact)



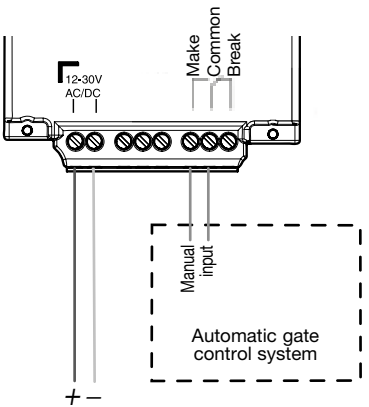
Total maximum output power:

Incandescent lamp	1000 W
230 AC halogen lamp	1000 W
12 V ELV halogen lamp	1000 W
Ferromagnetic transformer halogen	1000 W
Electronic transformer halogen	1000 W
Compact fluorescent (Low consumption bulb)	200 W
Fluorescent tubes non compensated	500W
Parallel compensated fluorescent tubes	prohibited

IMPORTANT: to be fitted on a disconnectable circuit via a 16 A protection device.

SA707AX external receiver (12-24 V/dry contact)

Example with connection to an automatic gate control system (Normally Open dry contact)



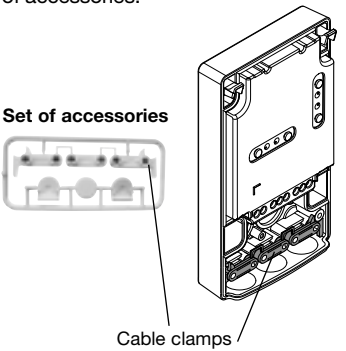
Maximum load:

24 V direct current	1 A
24 V alternating current	2 A
12 V direct current	2 A
12 V alternating current	2 A

Minimum load:

12 V AC/DC	I > 10 mA

3. When using the standard fixing method, hold the cables in place using cable clamps. Fix them in place using the 6 screws provided in the bag along with the set of accessories.

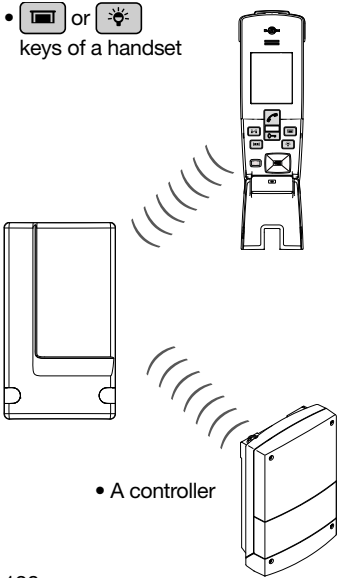


You can now move on to the radio link creation step.

4. Functions

The receiver can be controlled by the following devices:

- [ ] or [ ] keys of a handset



- A controller

To perform the following functions:

- **Toggle switch:** for controlling lighting or an electrical appliance with activation and de-activation of the device every time the key is pressed. With this function, the same key or command is used to activate and deactivate.
- **ON:** for controlling lighting or an electrical appliance.
- **OFF:** for deactivating lighting or an electrical appliance.
- **Presence simulation:** for simulating presence by switching lights or another type of electrical appliance on and off.

IMPORTANT: in this operating mode, the receiver memorises and then reproduces the activation and deactivation operations of the electrical appliance from one week to the next. The receiver therefore needs to be used for a minimum of one week before activating the simulated presence function.

- **Timer:** for controlling lighting or an electrical appliance with automatic disarming at the end of the programmed time limit.
- **Pulse:** for activating an electrical appliance for a time limit of several seconds.

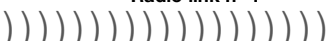
Some of these applications may be used simultaneously.

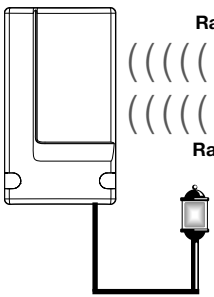
Grouped functions	Exclusive application
Toggle switch ON OFF Presence simulation Timerv	Pulse control

For example, it is possible to programme the 3 functions below on the same receiver:

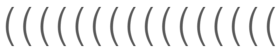
Press once on  to switch on lighting for a duration of 5 min. (radio link n° 1).
It is the **Timer** function that is used.

Radio link n° 1

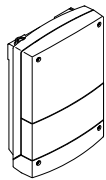




Radio link n° 2



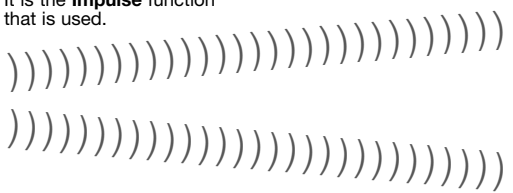
Radio link n° 3

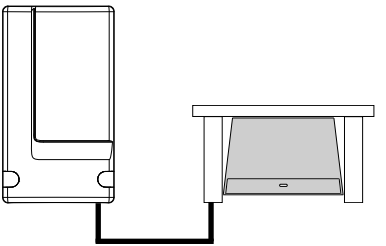


When the gate is opened the lighting is switched on (radio link n° 2).
When the gate closes 2 minutes later the lighting is automatically switched off (radio link n° 3).
It is the **Arm** and **Disarm** functions that are used.

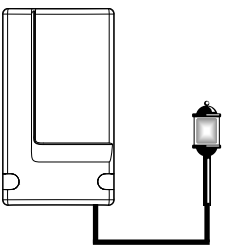
It is also possible to use the same key to control several receivers differently.
For example:

Radio link n° 1
Press once on the key to open the garage door and press again to close.
It is the **Impulse** function that is used.





Radio link n° 2
Pressing again on the key switches on the lighting hence facilitating access to the garage for a duration of 3 minutes.
It is the **Timer** function that is used.



5. Creating the radio link

5.1 General information

Configuring an Optwin® receiver consists in:

- Creating radio links between the different transmitter and receiver products to define who controls who and who sends information to whom.
- Allocating a function to each radio link, e.g. when the Light button on the handset is pressed, this activates the lighting controlled by the output receiver for 5 minutes.

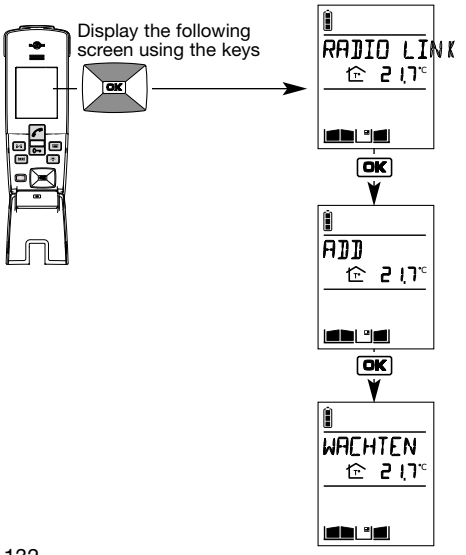
A radio link is created and a function is allocated to this radio link as part of the same procedure. This procedure is as follows:

Transmitter	Receiver
1. Switch to radio link creation mode.	
	2. Switch to radio link creation mode.
	3. Select the function.
4. Select the button or event associated with the function.	
5. Validate the procedure.	

5.2 With a handset

Handset

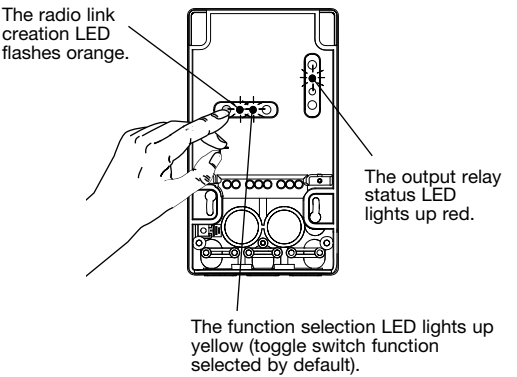
1. Switch to radio link creation mode.



Receiver

2. Switch to radio link creation mode.

Press on the radio link creation key.

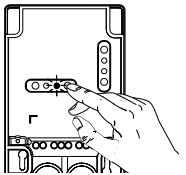


Handset

Receiver

3. Select the function.

Select the required function by pressing on the selection key as many times as necessary. Each time the key is pressed, the selection LED changes colour as described in the table below:

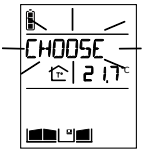


Selection LED status	Function selected	Number of times pressed
Fixed yellow	**Toggle switch (factory setting)**	0
Fixed green	Arm	1
Fixed red	Disarm	2
Fixed Cyan	Arm presence simulation	3
Fixed blue	Disarm presence simulation	4
Flashing yellow	30 s timer	5
Flashing green	90 s timer	6
Flashing red	3 min timer	7
Flashing cyan	5 min timer	8
Flashing blue	15 min timer	9
Flashing dark blue	30 min timer	10
Flashing pink	60 min timer	11

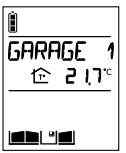
Selection LED status	Function selected	Number of times pressed
Briefly lights up yellow	1 s impulse	12
Briefly lights up green	2 s impulse	13
Briefly lights up red	3 s impulse	14
Briefly lights up cyan	4 s impulse	15
Briefly lights up blue	5 s impulse	16
Briefly lights up dark blue	6 s impulse	17
Briefly lights up pink	7 s impulse	18

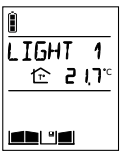
Handset	Receiver

4. Keuze van de toets verbonden aan de functie.



Press on the [ ] or [ ] key.





Select a command from the following:

GARAGE 1	or	**LIGHT 1**
GARAGE 2		**LIGHT 2**
GARAGE 3		**LIGHT 3**
GARAGE 4		**LIGHT 4**

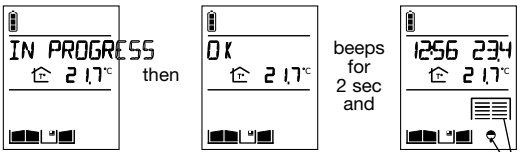
IMPORTANT: a receiver can be associated with each GARAGE command and 4 receivers for each LIGHT command.

Using the keys [ ]

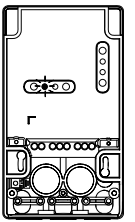
Handset

5. Validate the procedure.

Press **OK**. The handset displays:



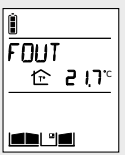
Receiver



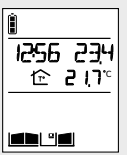
The radio link creation LED lights up green for 2 sec.

The radio link has been created.

If an error occurs, the handset displays:



It beeps 3 times and then automatically returns to the general information screen:



The receiver radio link creation LED flashes red 3 times.
Perform the radio link creation procedure again.

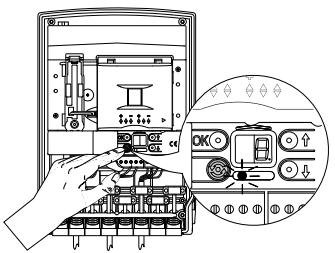
5.3 With a controller

Controller

1. Switch to radio link creation mode.

Press 

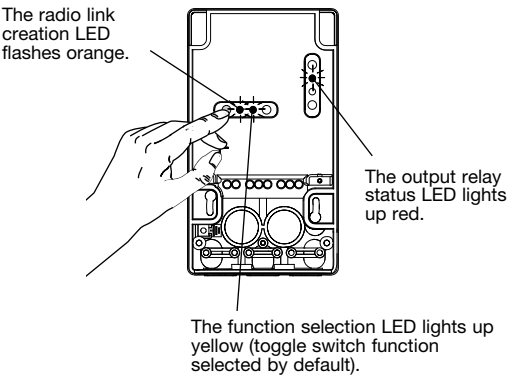
The radio link creation LED lights up orange.



Receiver

2. Switch to radio link creation mode.

Press on the radio link creation key.

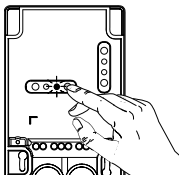


Controller

Receiver

3. Select the function.

Select the required function by pressing on the selection key as many times as necessary. Each time the key is pressed, the selection LED changes colour as described in the table below:



Selection LED status	Function selected	Number of times pressed
Fixed yellow	**Toggle switch (factory setting)**	0
Fixed green	Arm	1
Fixed red	Disarm	2
Fixed Cyan	Arm presence simulation	3
Fixed blue	Disarm presence simulation	4
Flashing yellow	30 s timer	5
Flashing green	90 s timer	6
Flashing red	3 min timer	7
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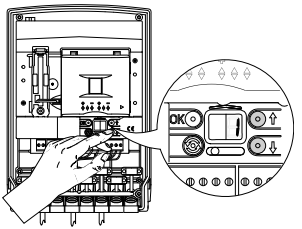
Selection LED status	Function selected	Number of times pressed
Briefly lights up yellow	1 s impulse	12
Briefly lights up green	2 s impulse	13
Briefly lights up red	3 s impulse	14
Briefly lights up cyan	4 s impulse	15
Briefly lights up blue	5 s impulse	16
Briefly lights up dark blue	6 s impulse	17
Briefly lights up pink	7 s impulse	18

Controller | **Receiver**

4. Select the event associated with the function.

Using the , keys and controller display



Event N°	Event name	Comment
1	Gate opening	This event is displayed when the gate is opened.
2	Gate closed	This event is displayed when the gate closes, as long as limit switches have been wired.
3	Latch opening	This event is displayed when the latch is opened.
4	Side gate closed	This event is displayed when the side gate closes, as long as limit switches have been wired.
5	Day breaking	This event is displayed when the day breaks. Useful for switching off night lighting.
6	Night falling	This event is displayed when the night falls. Useful for switching on night lighting.

Controller | **Receiver**

or

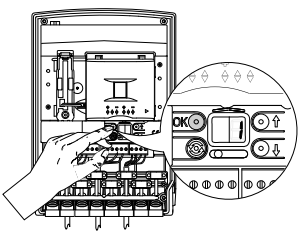
4. Select the key associated with the function.

Press: gate , latch , or cal on the outdoor caller unit.

IMPORTANT: step 5 is not necessary if the outdoor caller unit gate, latch or call buttons have been selected.

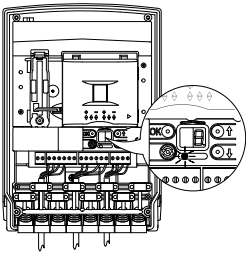
5. Validate the procedure.

Press OK.

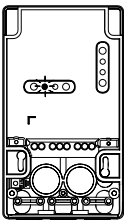


Controller

The radio link creation LED lights up green for 2 sec., the outdoor caller unit beeps for 2 sec.
Otherwise, start the procedure again.



Receiver



The radio link creation LED lights up green for 2 sec.

The radio link has been created.

IMPORTANT: if an error occurs, the receiver and controller radio link LED flashes red 3 times. The radio link creation process should be performed again in this case.

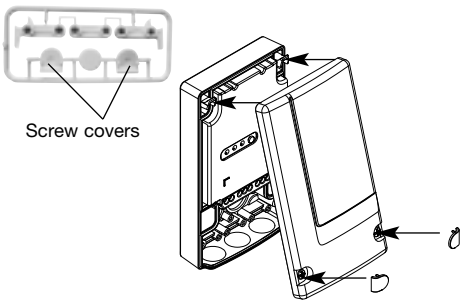
6. Real tests

Perform real tests to check that external receiver operation corresponds to the selected programming.

7. Closing the box

1. Close the box by hooking the cover back on to the base starting from the top.

2. Tighten the 2 screws and conceal them using screw covers (provided with the set of accessories).

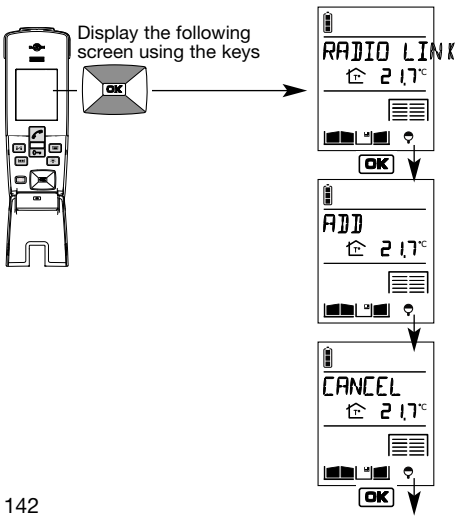


8. Deleting radio links and returning to factory programming

8.1 With a handset

Handset	Receiver

1. Switch to radio link deletion mode.

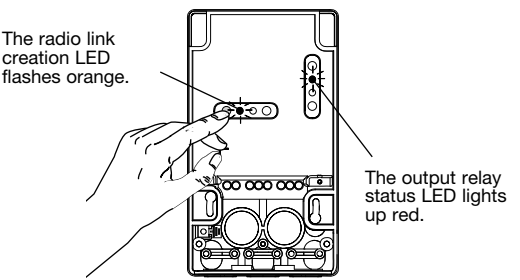


Handset

Receiver

2. Switch to radio link deletion mode.

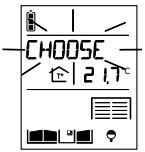
Press **more than 3 s** on the radio link creation key.



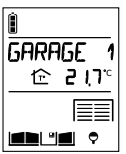
Handset

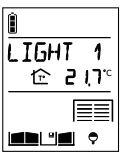
Receiver

3. Select the key to be deleted



Press on the
 or  key.





Select a command from the following:

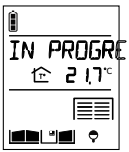
GARAGE 1	or	**LIGHT 1**
GARAGE 2		**LIGHT 2**
GARAGE 3		**LIGHT 3**
GARAGE 4		**LIGHT 4**

Using the keys 

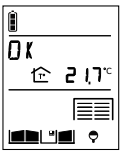
Handset

4. Validate the procedure.

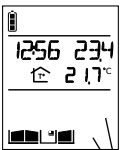
Press **OK**. The handset displays:



then

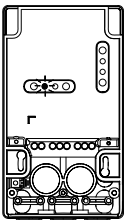


beeps for 2 sec and



The garage or light icon disappears

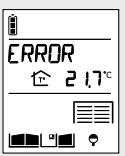
Receiver



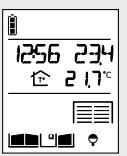
The radio link creation LED lights up green for 2 sec.

The radio link has been deleted.

If an error occurs, the handset displays:



It beeps 3 times and then automatically returns to the general information screen:



The receiver radio link creation LED flashes red 3 times.
Perform the radio link deletion procedure again.

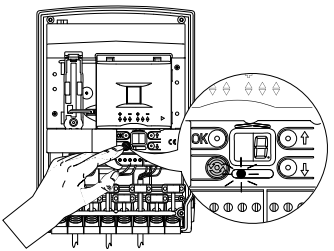
8.2 With a controller

Controller

1. Switch to radio link creation mode.

Press 

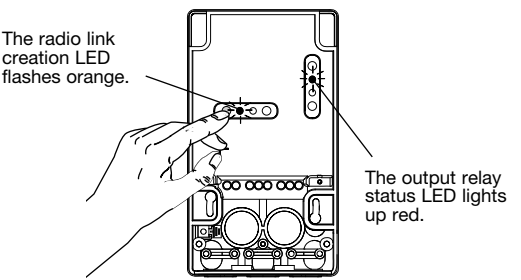
The radio link creation LED lights up orange.



Receiver

2. Switch to radio link deletion mode.

Press **more than 3 s** on the radio link creation key.

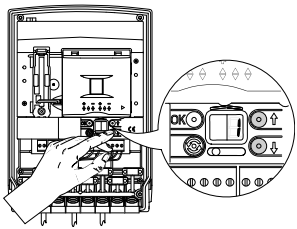


Controller

Receiver

3. Select the event to be deleted.

Using the , keys and controller display



Event N°	Event name
1	Gate opening
2	Gate closed
3	Latch opening
4	Side gate closed
5	Day breaking
6	Night falling

Controller | **Receiver**

or

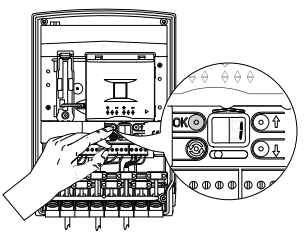
3. Select the key to be deleted.

Press: gate, latch, or cal on the outdoor caller unit.

IMPORTANT: step 4 is not necessary if the outdoor caller unit gate, latch or call buttons have been selected.

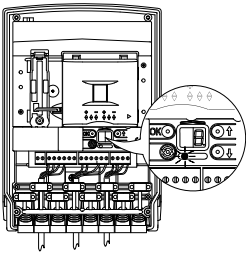
4. Validate the procedure.

Press OK.

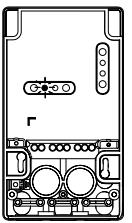


Controller

The radio link creation LED lights up green for 2 sec., the outdoor caller unit beeps for 2 sec.
Otherwise, start the procedure again.



Receiver



The radio link creation LED lights up green for 2 sec.

The radio link has been deleted.

IMPORTANT: if an error occurs, the receiver and controller radio link LED flashes red 3 times. The radio link creation process should be performed again in this case.

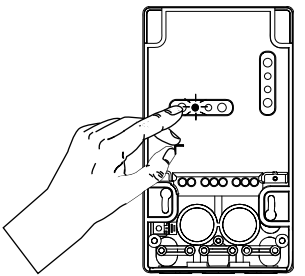
8.3 Returning to factory programming

IMPORTANT: only apply this procedure if you lose receiver control devices. Otherwise, follow the procedures described in chapters 8.1 and 8.2.

This procedure makes it possible to delete all receiver radio links and return all parameters to factory settings.

1. Press the radio link creation key and immediately release it.

2. Press and hold the same key for more than 10 seconds until the radio link creation LED stops flashing red. It will then light up green for 2 seconds.



9. Daitem guarantee and extension conditions

Daitem guarantees all its manufactured products for 2 years from the date of registration of the guarantee, or, if not registered by return of the registration card, for 2 years from the date of manufacture

IMPORTANT: Products marketed by Daitem may be granted an extended guarantee of 1 additional year free of charge under the following conditions: in order to be able to benefit from the extended guarantee, within 10 days of the sale the purchaser must return, or otherwise be ineligible, to Daitem, his/her extended guarantee application legibly filled in and duly completed (name and address, retailer's stamp, date of sale, product serial number). Only the date of registration by Daitem shall be valid for assessing compliance with the above-mentioned period.

As regards any purchase of a supplementary product or replacement product within the context of the After-Sales Service, the extended guarantee application corresponding to the product(s) must be returned. Any invoice relating to your products must be retained as this may be required for application of the guarantee.

The guarantee gives entitlement to a standard exchange or to repair, at the discretion of Daitem.

The guarantee shall apply only if the product sold is used by the purchaser in the normal manner and under normal conditions, in accordance with the use instructions supplied by Daitem and with its intended purpose.

Any product that has been exchanged becomes the property of Daitem definitively and irrevocably.

Any product exchanged under guarantee benefits from the remaining guarantee term applying to the original product.

The guarantee relates solely to products marketed by Daitem, but does not apply to power sources (lithium cells and batteries) or other consumables.

Certain products or accessories - such as the mobile phone incorporated into GSM transmitters, video cameras, motors, etc. (non-exhaustive list) - may not benefit from an extended guarantee. These items are listed by Daitem.

The guarantee does not apply in the event of:

- failure to comply with the installation instructions provided by Daitem,
- abnormal use of the products or use of the products that does not comply with Daitem specifications,
- intervention or conversion of any type whatsoever, apart from any instruction given by Daitem,
- damage by dropping or impact,
- natural disaster, atmospheric phenomenon or vandalism, and also in all cases where an event occurring after the sale, independent of the wishes of Daitem, that is unavoidable and of which Daitem could not reasonably have been held to predict either the occurrence or the effects, would prevent the fulfilment of its essential obligations,
- use of power supplies other than those indicated by Daitem,
- incident arising during carriage,
- negligence or faulty maintenance on the part of the user.

The Daitem guarantee does not affect the legal provisions arising from:

- Articles 1641 et seq. of the Civil Code relating to legal guarantees for concealed defects,
- Article L211-2 of the Consumers' Code.

In the interests of improving its products, Daitem reserves the right to modify them without notice and without prejudice to Article L111-2 of the Consumers' Code.

10. Technical data

Technical data techniques	External receiver 230 V - volt free contact, SA706AX External receiver 12-24 V - volt free contact, SA707AX
LEDs	• 2 configuration LEDs • 2 status LEDs
Programming keys	2 programming push-buttons
Total maximum output powers	SA706AX: • incandescent lamp 1000 W • ferromagnetic transformer halogen 1000 W • 230 AC halogen lamp 1000 W • compact fluorescent (Low consumption bulb) 200 W • 12 V ELV halogen lamp 1000 W • fluorescent tubes non compensated 500 W • electronic transformer halogen 1000 W • parallel compensated fluorescent tubes prohibited
Maximum load	SA707AX: • 24 V direct current 1 A • 12 V direct current 2 A • 24 V alternating current 2 A • 12 V alternating current 2 A
Minimum load	SA707AX: 12 V AC/DC I > 10 mA
Applications possible	• ON • timer • toggle switch • OFF • pulse control • presence simulation
Power supply	SA706AX: 230 V AC - 50 Hz (16 A) with protection and disconnection possibility SA707AX: 12-30 V AC or DC
Operating temperature	-20 °C min. / +70 °C max.
Degree of protection	IP55 and IK04
Insulation class	SA706AX: class 2 ⧈
Consumption	SA706AX: 17 VA SA707AX: • 12 V direct current: 22 mA • 24 V direct current: 11 mA • 12 V alternating current: 24 mA
Installation	inside or outside
Dimensions (H x W x D)	150 x 85 x 35 mm
Weight	224 g
Radio link	Frequency 868/870 MHz.Class 2 Receiver.Duty cycle ≤ 1%

DECLARATION OF CONFORMITY

NL
10

Manufacturer: **Hager Security SAS**
Address: **F-38926 Crolles Cedex - France**

Product type: **External receiver**
Trade mark: **Daitem**
We declare under our sole responsibility that the products to which this declaration relates are thus compliant with the essential requirements of the following European Directives:

- **R&TTE Directive: 99/5/CE**
- **Low voltage directive: 2006/95/CE**
- **Directive ROHS: 2002/95/CE**

in compliance with the following harmonised European Standards:

Products code	SA706AX	SA707AX
EN 300 220-2 V2.1.2	X	X
EN 301 489-1 V1.8.1	X	X
EN 60950 (2006)	X	X
EN 60 669-2-1	X	X
EN 60 730-1	X	X
EN 55014, 55022 & 55024 (2002)	X	X
EN 50090-2-2	X	X

These products can be used in all EU, EEA Countries and Switzerland.

Crolles 13/12/10

Signature:
Patrick Bernard
Research & Development Manager

Non-binding document, subject to modification without notice.

Waste processing of electrical and electronic devices at the end of their service life (Applicable in European Union countries and other European countries with a waste collection system). Used on products or product packaging, this symbol indicates that the product must not be thrown out with household waste. It must be taken to a waste collection point for electrical and electronic product recycling. When you make sure that this product is disposed of in the most appropriate manner, you are helping to protect the environment and human health. If you would like additional information concerning the recycling of this product, please contact your town/city council, nearest waste collection centre or the shop where you bought the product.