

The UC-82 wireless relay output module

The UC-82 is a component of Jablotron's JA-80 Oasis system. It is powered by an external 12V DC power supply and it provides 2 relays which can be controlled by radio signals and offers the following:

- Remotely controllable relay outputs which follow JA-80 control panel programmable PG outputs
- Remote control of appliances using RC-8x controllers
- Relay output of JA-8x wireless detectors

The enrollment of transmitters

The X and Y relays are totally independent. Jablotron Oasis devices with transmitters can be enrolled to them individually using the X and Y enrollment buttons. Each relay offers 4 different enrollment modes (1 to 4, see the following table). The reaction of a relay to a transmitter signal depends on which enrollment mode the transmitting device has been enrolled to.

Enrollment procedure

- Use **X or Y button** depending on which relay you want to enroll a device to.
- **Repeatedly press the relevant X or Y button** to select the desired enrollment mode 1 to 4 as indicated by the flashing of corresponding LEDs 1 to 4 (see the table for guidance on choosing the right enrollment mode).
- Activate the transmitting device while the LED is flashing as follows:
 - **key fob** –press a button
 - **detector** –connect its battery up (if it has already been connected, first disconnect it, then press and release the detector's tamper switch)
 - **Control panel PG output** –key in 299 in service mode
- **Enrollment is confirmed** by a short flash from all the UC-82 indicators.
- If **no enrollment signal has been received within 10 sec.**, enrollment mode automatically ends.
- If you wish to enroll **another device**, repeat the above enrollment procedure

Notes:

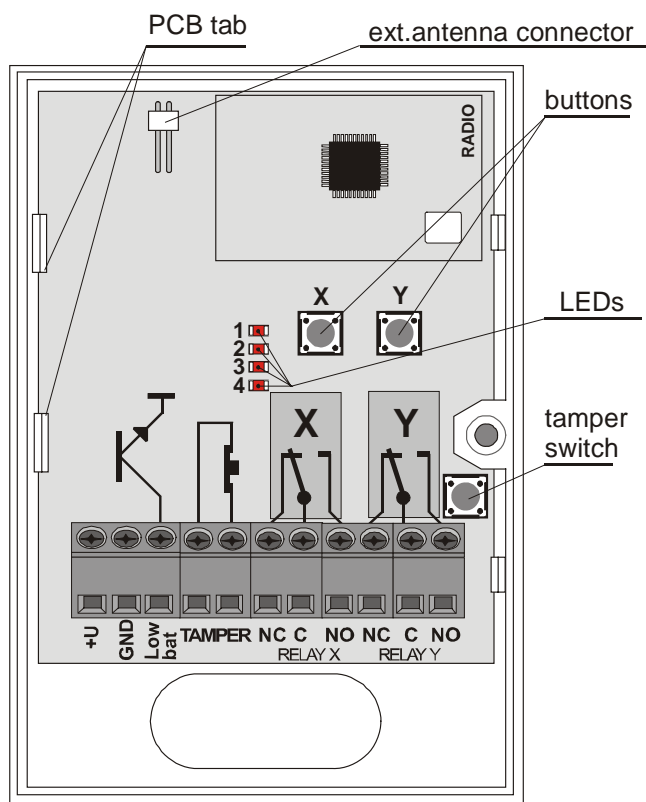
- If a device does not enroll, either it is too far from the receiver, or there is another device already enrolled which cannot be combined with the new one, or the maximum number of devices has been exceeded.
- Each device can have its own individual reaction (it is possible to combine different reactions for a single relay = enrolling different devices in different enrollment modes to the same relay)
- The relay always performs the last received instruction (e.g. if the relay is already on and a signal for a 2 minute pulse is received, the relay will stay on for another 2 minutes and then it will turn off).
- Each transmitting device (keyfob, detector, control panel, etc.) can be enrolled to an unlimited number of different receivers.
- Devices are enrolled to a non-volatile memory, so the UC-82 will not forget them if its power is disconnected.

Use with RC-8x remote controllers

- **Up to 60 remote controllers** can be enrolled to each relay.
- To **operate garage door or parking gate actuators**, use the 1 sec. pulse mode and connect the NC relay contact to the push button input of the actuator unit.

Use with JA-8x wireless detectors

- Detectors can be enrolled to pulse modes (up to 60 detectors to each relay). The 2 minute mode is suitable for **automatically switching on lights, ventilators** etc.
- If a **detector(s) is enrolled in mode 3**, then the relay will be switched if the detector's tamper sensor is triggered. In this mode up to 8 detectors can be enrolled to a single relay (it will be switched if any of the detectors is tampered with), but no other kind of device can be enrolled, only detectors.
- If a **detector(s) is enrolled in mode 4**, then the relay triggers if the detector's sensor is triggered. In this mode up to 8 detectors can be enrolled to a single relay (which triggers if any of the detectors is triggered), but no other kind of device can be enrolled, only detectors.
- The **Low bat output** switches to GND if any of the enrolled detectors signals a low battery.



Installation

Installation of this module shall only be undertaken by technicians holding a certificate issued by an authorized distributor.

Open the module's cover (1 screw) and take out the circuit board (2 tabs). Install the back part of the housing to the desired place, re-install the circuit board, connect the wires and enroll the desired wireless devices. Connect an optional external antenna (AN-80 or AN-81) to the relevant connector, if used (see the above diagram).

Terminals

- +U, GND** Power, 10 to 14V DC, stand-by consumption about 20mA
- Low bat** Low detector-battery indication, switches to GND (max. 100mA/24VDC)
- TAMPER** Normally-closed tamper contact (max. 100mA/24VDC)
- NC, C, NO** Switchover relay (X and Y) contacts, (each max. 2A/24V DC or 2A/120V AC)

Mode.	Reaction	Device	Enrollment method	Max. number	Notes
1	1 sec. pulse	key fob	button pressing	60	<ul style="list-style-type: none"> • key fobs and detectors can be combined • the relay stays on 1sec, turns off and is then ready to be activated again (the pulse is not extended if another 1 sec. pulse activation signal is received while the relay is still on)
		detector	connecting battery up		
2	2 min. pulse	key fob	button pressing	60	<ul style="list-style-type: none"> • key fobs and detectors can be combined • if another 2min. activation signal is received while the relay is on for 2 min., then the relay stays on 2 min. more (the 2 minute pulse is extended if re-activated during the pulse)
		detector	connecting battery up		
3	Latch *	key fob	button pressing	60	<ul style="list-style-type: none"> • impossible to combine keyfobs with detectors • * latch = on – off – on – off ... • Tamper = on = relay turns on when a detector's tamper sensor is triggered.
	Tamper= on	detector	connecting battery up	8	
4	on / off	key fob	button pressing	60	<ul style="list-style-type: none"> • impossible to combine keyfobs with detectors or a control panel PG output
		PG output of control panel	entry of 299 in Service mode	1	
	Triggering =on	detector	connecting battery up	8	<ul style="list-style-type: none"> • impossible to combine detectors with keyfobs or with a control panel PG output

To extend an existing hard-wired system with wireless detector(s) – enroll the detector(s) to relay X in mode 4 and once again to relay Y in mode 3. This way the X relay will work as a detector trigger output, the Y relay as a detector tamper output and the Low bat terminal will provide low battery indication. Up to 8 detectors can be enrolled to the UC-82 this way and the corresponding output will be triggered if any of the enrolled detectors reports triggering, tampering or a low battery.

Using the UC-82 with control panel PG output signals

- if the control panel is enrolled to the X relay (in mode 4 by entering 299) then the **X relay works as a control panel PGX output**.
- if the control panel is enrolled to the Y relay (in mode 4 by entering 299) then the **Y relay works as a control panel PGY output**.
- Only one **control panel PG output** can be enrolled to **each relay**. No other transmitting devices can be enrolled to a relay already occupied by a control panel PG output.

Resetting the UC-82 unit

New UC-82 units are sold with factory-default settings (i.e. both relays have nothing enrolled). To reset a particular relay, do the following:

- Repeatedly press the X button (or the Y button for the Y relay) to achieve the highest number LED flashes (4, or if not possible, then 3).
- Then, continuously press the same button and keep pressing it until all the LEDs flash a couple of times (=Reset). Then release the button.

Technical specifications

Power supply:	10 to 14V DC, standby consumption approx. 20mA
X and Y relay contact rating:	max 2A/24V DC or 2A/120V AC
Low bat terminal:	max 100mA/24V DC
TMP terminals:	max 100mA/24V DC
Communication band:	868 MHz, Oasis protocol
Minimum distance from transmitting devices	1 meter
Operating environment class II	general, indoor -10 to +40 °C
Enclosure	IP40 EN 60529
Mechanical immunity	IK08 EN 50102
Dimensions:	76 x 110 x 33 mm, antenna 35 mm
Can be operated according to	ERC REC 70-03

This product complies with ETSI EN 300220, ETS 300683, and EN 60950



Jablotron Ltd. hereby declares that the UC-82 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The original of the conformity assessment can be found at www.jablotron.com, Technical Support section



Note: Although this product does not contain any harmful materials we suggest you return the product to the dealer or directly to the producer after use.

