

# UC-281 Wireless Interface

The UC-281 is an 8-zone interface linking JA-60 wireless detectors with hard-wired security control panels. Additionally, it can receive signals from Jablotron RC-xx remote controls. If necessary, UC-282 expander modules can be used to increase the number of zones up to 40.

## Specification

Power	12 V DC (10.5 V – 16.0 V)
Power consumption	typ. 50 mA (all relays off) max. 150 mA
Zone outputs Z1-Z8	8x optoMOS relays 100 mA / 60 V with COM1 common terminal
Outputs	3x optoMOS relays 100 mA / 60 V NC with COM2 common terminal
Tamper	NO with COM2 common terminal
Fault, Battery	433.9 MHz
Operating frequency	100 m (open area)
Working range with JA-60	30 m (open area)
Working range with RC	indoor use (class II, EN 50131-1)
Working environment	-10 °C to +70 °C
Operating temperatures	max. 90 %
Operating humidity	188 x 135 x 40 mm
Dimensions	800 g
Weight	



Hereby, Jablotron Ltd., declares that this UC-281 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. Original of the conformity assessment can be found at the web page [www.jablotron.cz](http://www.jablotron.cz), section Technical support.

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

Purchase package contains: electronic board, metal case, antenna, screws, dowels, and manual.

## Installation

The UC-281 is an electronic module built-in to a metal case (protected by a tamper switch). The case should be installed on a wall with its antenna in a vertical position. The device should not be installed close to any metal structures or other objects obstructing radio signal transmission.

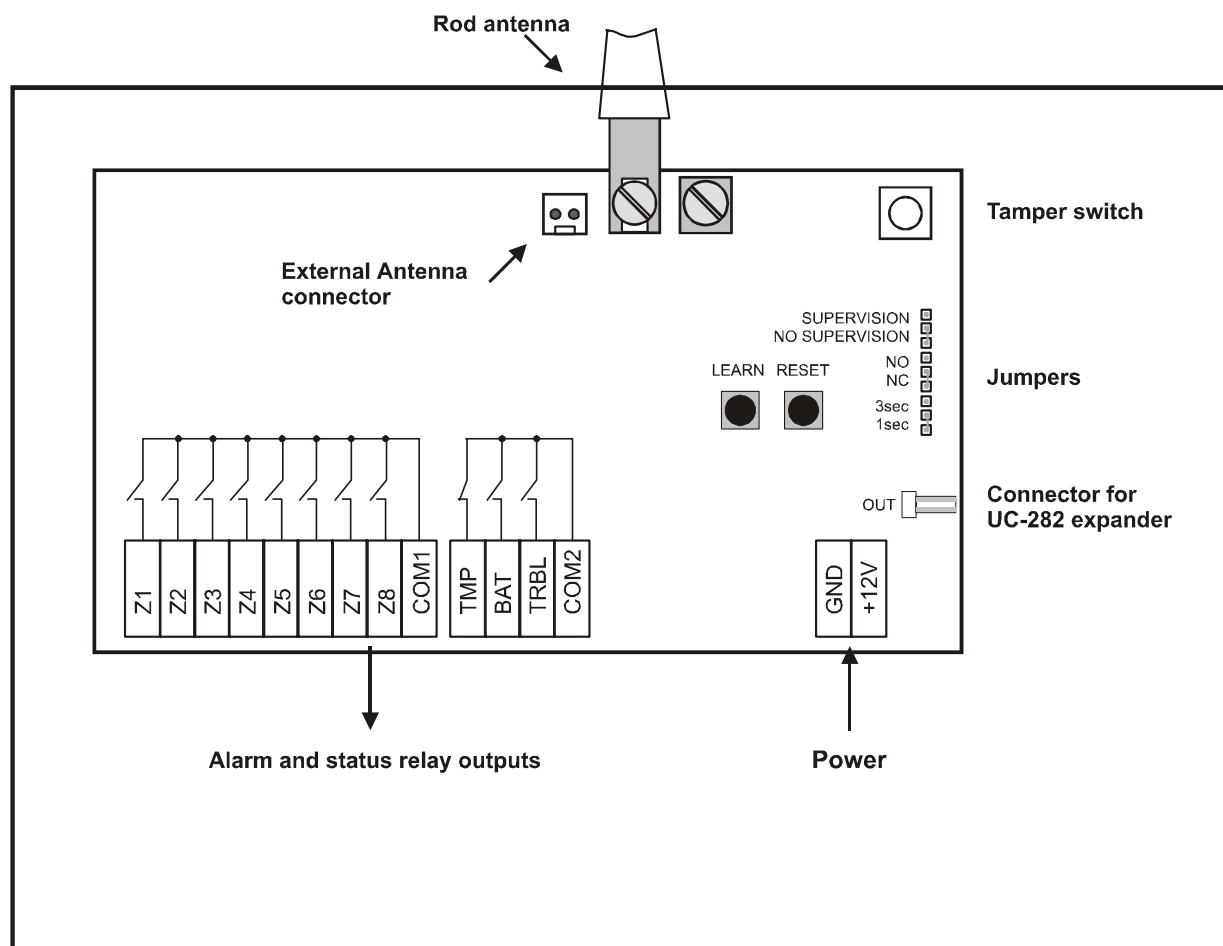
Route the wires through the hole in the rear part of the housing. Attach the case to the desired place using the provided screws. Connect the antenna and the tamper switch.

## Terminals:

<b>Z1-Z8</b>	Zone 1-8 output relays' contacts, max. 100 mA / 60 V, pulse length can be set by 1s/3s jumper, normally closed or normally opened mode is selected by the NO/NC jumper
<b>COM1</b>	common terminal of Z1-Z8 relays
<b>TMP</b>	tamper relay output (tamper signal from wireless detectors, a wireless siren and the UC-280 tamper switch), max. 100 mA / 60 V
<b>BAT</b>	low battery relay output (low battery signal from wireless detectors 1-8 or a wireless siren), max. 100 mA / 60 V
<b>TRB</b>	trouble relay output (trouble signal from wireless detectors 1-8 or a wireless siren - e.g. lost communication), max. 100 mA / 60 V
<b>COM2</b>	common terminal of TMP, BAT and TRB relays
<b>GND</b>	power supply ground terminal
<b>+12V</b>	power voltage terminal
<b>TAMPER</b>	a pair of terminals used for the connection of the case tamper switch

## Connectors:

<b>OUT</b>	data connector for UC-282 expander module
<b>ANT</b>	AN-01A external antenna connector (when AN-01A is used, the rod antenna must be disconnected)



### Setting buttons:

- LEARN** if this button is briefly pressed, you can scroll through the learning modes of Z1-Z8 zones (a selected channel is indicated by a red flashing LED).
- RESET** if this button is briefly pressed, the learning mode of a selected zone will be closed. When this button is pressed for more than 3 sec., a selected zone will be deleted (confirmed by flashing of the TMP, BAT and TRB indicators). When this button is pressed for more than 6 sec., all zones will be deleted (confirmed by flashing of all indicators). Note, in order to delete all zones, a learning mode of any zone must be selected first.

### Jumpers:

- 1s / 3s** pulse length of 1 sec. or 3 sec. of Z1-Z8 output relays
- NO / NC** normally closed or normally opened mode of Z1-Z8 output relays (TMP, BAT and TRB are normally closed)
- Supervision** - Regular checking of wireless detectors' communication can be disabled (NO SUPERVISION position). This setting is recommended in places with radio interferences. When the supervision is enabled, lost communication will trigger the TRB output relay.

### Indicators:

- POWER** The green LED indicates the presence of the power supply
- Z1 - Z8** LED lights green when zone is occupied;  
LED lights red when zone detector is triggered;  
LED flashes red, when zone is in a learning mode;  
LED flashes red together with the TMP, BAT or TRB LED = tamper, low battery or trouble signal in zone
- TMP** tamper alarm – flashes together with a corresponding zone indicator every 3 sec.
- BAT** low battery - flashes together with a corresponding zone indicator every 3 sec.
- TRB** trouble or lost communication - flashes together with a corresponding zone or SIR indicator every 3 sec.

### Enrolling of wireless components

#### Enrolling of detectors

- Scroll to a desired zone Z1-Z8 using the LEARN button
- JA-60 detectors will be enrolled by inserting their batteries or switching on a power supply
- Successful learning is indicated by the red LED
- If you enroll a component to a new zone, it will move from its previous position
- Only one detector can be enrolled to each zone

#### Enrolling of remote controls

- Scroll to a desired zone Z1-Z8 using the LEARN button
- RC-xx remote controls will be enrolled by pressing a button (while in pulse mode). Button A, B or double press can be enrolled.
- RC-11 or RC-22 Remote controls can be enrolled to any zone in an ON/OFF mode by pressing both buttons and keeping them pressed for more than 5 sec. After this the corresponding relay will switch on when the A button is pressed, and off, when the B button is pressed.
- If a combination of double press and ON/OFF mode is required, the ON/OFF mode must be enrolled first.
- Successful learning is indicated by the red LED
- If you enroll a remote control to a new zone, it will move from its previous position
- Only one remote control can be enrolled to each zone

#### Erasing components

If you want to delete any item from a UC-281, use the RESET button (the procedure is described in "Setting buttons" paragraph).

### Extension for more zones

When 8 zones are not enough, you can use UC-282 expander modules. Each UC-282 module provides additional 8 zones. A maximum of 4 expanders can be used with UC-281. Modules are interconnected using the IN and OUT connectors, wiring should not exceed 1 meter. Each UC-282 must be powered by 12 V DC separately.

If communication with wireless modules UC-216, UC-222 or JA-60A wireless siren is required, use the UC-280 interface module.



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