

UC-280 Wireless Interface

The UC-280 is an 8-zone interface linking JA-60 wireless detectors with hard-wired security control panels. It can also send triggering signals to a JA-60A wireless outdoor siren and/or UC-216 and UC-222 universal receivers. 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	8 relays 50 mA / 50 V with COM1 common terminal
Tamper, fault, battery outputs	3 relays 50 mA / 50 V with COM2 common terminal activated when switched to GND (filter 0.2 sec., 3 V DC triggering level)
X, Y and Siren inputs	
Operating frequency	433.9 MHz
Working range with JA-60	100 m (open area)
Working range with RC	30 m (open area)
Working environment	indoor use (class II, EN 50131-1)
Operating temperatures	-10 °C to +70 °C
Operating humidity	max. 90 %
Dimensions	188 x 135 x 40 mm
Weight	800 g

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

Installation

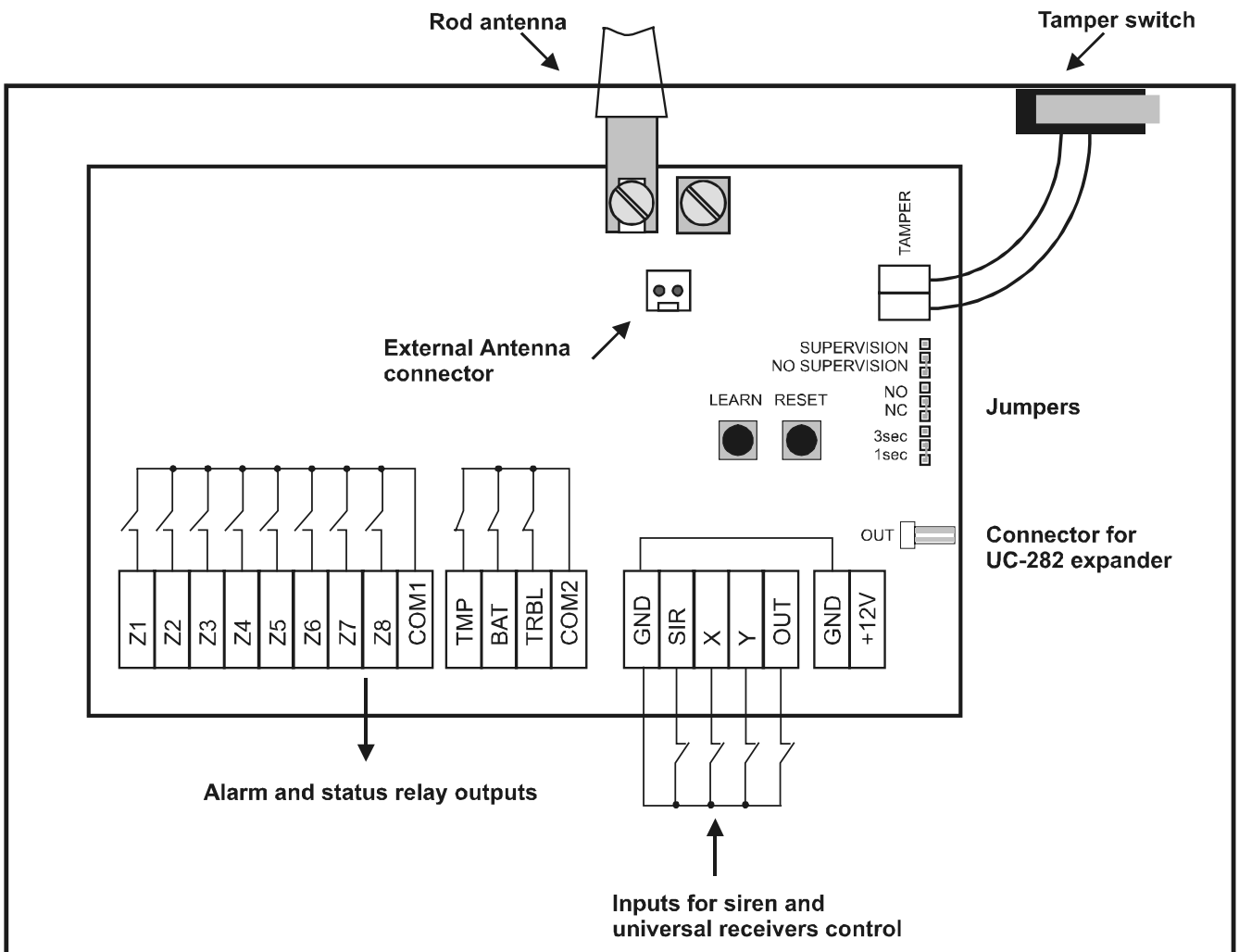
The UC-280 is an electronic module built-in to a metal case (protected by a tamper switch). The case should be installed on a wall with its antenna in a vertical position. The device should not be

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:

Z1-Z8	Zone 1-8 output relays' contacts, max. 50 mA / 50 V, pulse length can be set by 1s/3s jumper, normally closed or normally opened mode is selected by the NO/NC jumper
COM1	common terminal of Z1-Z8 relays
TMP	tamper relay output (tamper signal from wireless detectors, a wireless siren and the UC-280 tamper switch), max. 50 mA / 50 V
BAT	low battery relay output (low battery signal from wireless detectors 1-8 or a wireless siren), max. 50 mA / 50 V
TRB	trouble relay output (trouble signal from wireless detectors 1-8 or a wireless siren - e.g. lost communication), max. 50 mA / 50 V
COM2	common terminal of TMP, BAT and TRB relays
GND	power supply ground terminal
SIR	triggering input for activation of JA-60A wireless siren (the siren sounds as long as this input is closed to GND, max. 15 minutes)
X	input, which can trigger relay X of a UC-216 or UC-222 universal receiver when switched to GND
Y	input, which can trigger relay Y of a UC-216 universal receiver when switched to GND
OUT	input, which can trigger output OUT of a UC-216 universal receiver when switched to GND
+12V	power voltage terminal
TAMPER	a pair of terminals used for the connection of the UC-280 case tamper switch



Connectors:

OUT	data connector for UC-282 expander module
ANT	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 and a wireless siren SIR (a selected channel is indicated by a red flashing LED). When this button is pressed for more than 3 sec., the enrolling signal for a UC-216 / UC-222 receiver will be transmitted (learning mode of Z1-Z8 and SIR must be closed first)
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, SIR	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 and remote controls

- 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
- RC-xx remote controls will be enrolled by pressing a button (for pulse mode)
- RC-11 or RC-22 remote controls can also 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.
- Successful learning is indicated by the red LED
- If you enroll an existing component to a new position, it will move from its previous position
- Only one detector or remote control can be enrolled to each zone

Enrolling of a wireless siren

- Connect a battery in a JA-60A siren and power its adapter
- Select the SIR position with the LEARN button
- When the SIR position is selected, the UC-280 will send a learning signal to the JA-60A and vice versa. Triggering the SIR input will then activate a JA-60A, tamper alarm or power supply failure of the JA-60A will be transmitted to a UC-280
- Only one JA-60A siren can be used with a UC-280

Enrolling of UC-216 or UC-222 modules

- Select the learning mode in a receiver (mode X1 for UC-216 or mode 4 for UC-222)
- Learning mode of UC-280 must be closed
- Press and hold the LEARN button in UC-280 for 3 seconds
- The UC-280 will now be enrolled to the UC-216 or UC-222 receivers and triggering of X and Y inputs will trigger the UC-216 / UC-222 output relays.
- Unlimited number of UC-216 / UC-222 can be used with a UC-280

Erasing components

If you want to delete any item from a UC-280, 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-280. 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.