

# Wireless Control Receiver UC-216

## Description

The UC-216 is a three channel receiver of coded radio signals. The status of its two output relays and its output transistor is indicated on the front panel. Up to 20 remote controls (RC-11, RC-22) can be taught to the unit. There are three different operating modes available for the remote controls.

This allows the UC-216 to be used as a control for an alarm system, for remote gate opening, garage door control, panic switch etc. A floating code ensures a high security of transmission.

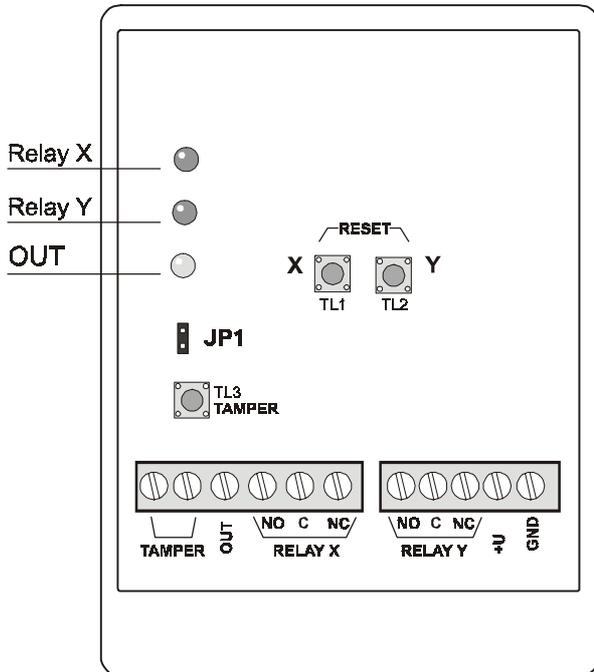
The UC-216 can also be used as a receiving unit for JA-60 wireless system items. This use, for example, allows an existing wire-operated alarm system to be extended with additional wireless detectors, wireless access control keypads, etc.

## Specifications:

Operating voltage:	12-24 V DC or 15 V AC
Power consumption:	standby 0.25 W max. 1 W (both relays activated)
Operating frequency:	433.92 MHz
Coding:	digital, each remote control or JA-60 item has a unique floating code
Output relays:	Max. 120 V / 1 A
Output transistor:	Max. 40 V / 0.2 A
Range (open area) :	with RC-11 up to 30 meters with JA-60 items, up to 100 meters
Working temperature	from -10 to +40°C
Designed for indoor use only.	

## Installation:

Open the external cover of the unit by pressing in the internal tab of the lock on the top (small flat screw-driver is appropriate). Loosen the central screw and remove the PCB. Route the wires through the hole in the bottom of the rear housing. Attach the housing to the desired place using the provided screws.



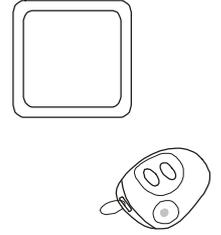
## Terminals description:

<b>TAMPER</b>	tamper switch output (max. 24 V / 100 mA)
<b>OUT</b>	output of NPN transistor to GND
<b>NC, NO, C</b>	output relay dry contacts (X and Y)
<b>+U, GND</b>	power voltage 11-24VDC or 15VAC

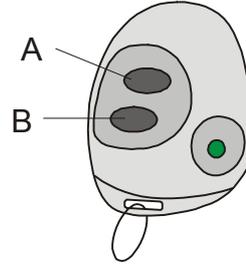
The status of relay X, relay Y and the OUT is indicated by 3 LED indicators on the front cover. When active, the corresponding LED lights.

## RC-11, RC-22 mode

**Remote controls enrolling** - you can enroll up to 20 different RC-11 or RC-22 remote controls to the UC-216 unit. There are two buttons on each remote control (A and B), enabling each remote control to send two different commands by pressing button A or B. The RC-11 can also send a third command by pressing the A & B button simultaneously (not available with the RC-22).



There are two setting buttons in the UC-216. Button X is used for relay X teaching; button Y is used for relay Y teaching. By pressing the setting button you can scroll through the three learning (operating) modes (1 to 3) indicated by a corresponding flashing indicator.



By pressing a button on the remote control while a desired UC-216 learning mode is selected, you enroll that button to the receiver's memory. The corresponding operating mode will now be associated with this remote control button.

## Operating modes available (valid for X and Y relays)

	MODE	reaction of the relay when RC button pressed	which RC button can be taught
1	pulse	relay will turn on for 2 seconds	A, B, A&B
2	latch	relay status will change to the opposite (ON/OFF/ON...)	A, B, A&B
3	ON - OFF	button A turns relay on, button B turns relay off	A or B

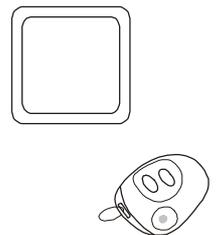
## Setting remarks

- new RC button enrollments are added to previously enrolled ones
- after 20 RCs are taught, no other remote can be added
- double flashing of the LEDs indicates a full memory
- if one button is taught for multiple modes, only the last taught mode will remain in the UC-216's memory
- you can combine different modes with different RC buttons
- the output OUT can be activated only by simultaneous pressing of the A&B buttons on the RC-11, only if the A button was enrolled for relay X and the B button for relay Y. The OUT mode is the same as the selected mode of relay X. This way three independent outputs can be controlled.
- A selected setting mode will close after an RC button is enrolled, or automatically after 10 seconds.
- All UC-216's can operate with only remote controls or JA-60 items. Combined operation is not available.

*Note: A remote control taught to the UC-216 can also be used for other devices. For example: the remote control of Jablotron's Accent car alarm can not only control your car with buttons A and B, but can also control another device, if the simultaneous pushing of A&B buttons has been taught to a UC-216 controller.*

## Garage door or gate opener mode

The UC-216, in combination with RC-11 or RC-22 remote controls, has an optional mode to control garage door or gate actuators. This mode is only available when the UC-216's memory is erased. By pressing the UC-216's X setting button, scroll until both LED's 1 & 2 are simultaneously flashing. Then, by pressing any button of the remote control, you teach it to the UC-216.



Operating of the remote control in this mode is as follows:

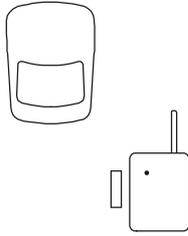
- pressing button A while both UC-216 relays are off, the relay X will be activated for 2 minutes
- pressing button B while both UC-216 relays are off, the relay Y will be activated for 2 minutes
- pressing any remote control button while any UC-216 relay is on, will switch off this relay.

Up to 20 remote controls can be enrolled to this mode, using the method above. After the first remote control is enrolled to this special mode, no other UC-216 learning mode will be available.

### Use of the UC-216 with JA-60 detectors

All wireless JA-60 detectors can be used with the UC-216. In such a case the UC-216's outputs have the following functions:

relay X	alarm trigger (detector output)
relay Y	tamper output (tampering of a detector or the signal that a detector was lost) - all detectors are supervised
OUT	low battery signal from a detector



A maximum of eight JA-60 detectors can be enrolled into a single UC-216's memory. The UC-216's outputs will react to all enrolled detectors. For example if any enrolled detector has an opened cover, the UC-216's Y relay will be activated.

The X relay reacts to all types of signals from a JA-60 detector (INST, DELAY, FIRE, PANIC). For example, the selection of INST or DELAY reaction in a JA-60P makes no difference to the function of the UC-216's output ( the relay will be activated instantly when any movement is detected).

### Enrolling of JA-60 detectors

Detectors can be enrolled to a UC-216 only if all other items (remote controls) have been erased from the UC-216's memory. The detectors can be enrolled the following way:

- remove the batteries from the JA-60 detector
- select learning mode no. 1 for relay X in the UC-216
- install batteries into the detector
- the UC-216 will automatically store the detector's code into its memory
- close the cover of the JA-60 detector

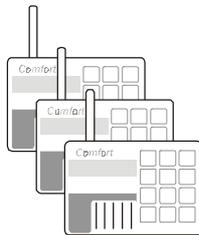
By repeating this procedure you can teach up to eight JA-60 detectors to each UC-216.

After the first JA-60 detector is enrolled, no other item will be possible to enroll other than additional JA-60 detectors.

### Use of the UC-216 with a JA-60D keypad

JA-60D keypads can be used with the UC-216. In such a case the UC-216's outputs have the following functions:

relay X	will change its status after a valid access code is entered on the keypad (on - off - on ...). The relay can also be switched on by entering F1 on the keypad (a quick arm function).
relay Y	is a tamper output (tampering of a keypad, more than 5 unsuccessful attempts to enter a valid access code or the signal that the keypad was lost) - all keypads are supervised
OUT	low battery signal from a keypad



A maximum of eight JA-60D keypads can be enrolled into a single UC-216's memory. The UC-216's outputs will react to all enrolled keypads. For example if any enrolled keypad has an open cover, the UC-216's Y relay will activate.

### Enrolling of the JA-60D keypad

The JA-60D keypads can be enrolled to a UC-216 only if all other items (remote controls, detectors) have been erased from the UC-216's memory. The keypad can be enrolled the following way:

- remove the battery from the JA-60D
- select learning mode no. 1 for relay X in the UC-216
- install the battery into the keypad
- The UC-216 will automatically store the keypad's code into its memory
- close the cover of the JA-60D keypad

By repeating this procedure you can teach up to eight JA-60D keypads to each UC-216.

After the first JA-60D keypad is enrolled, no other item will be able to be enrolled other than additional JA-60D keypads.

### Supervising Detectors and Keypads

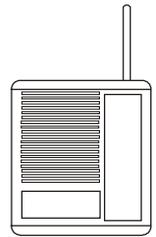
All enrolled JA-60 detectors (or keypads) transmit regular testing signals. If the UC-216 does not receive this testing signal from any enrolled detector (keypad) for a period longer than 1 hour, relay Y will be triggered (tamper output).

This supervising function can be disabled by disconnecting the JP1 jumper in the UC-216.

*Note: If the JP1 link is open, supervising is disabled and all of the UC-216's outputs (X, Y and OUT), will have a 2 second pulse reaction to signals from detectors or keypads. In the contrary, when the JP1 is closed, all of the UC-216's outputs are copying the status of the detector (for example, the Y relay is activated for the entire period in which a detector or a keypad is open, etc.) and entering of the access code on the keypad will change the condition of the relay X (on - off - on...).*

### Use of the UC-216 with the JA-60K control panel.

The UC-216 can also be used as a wireless output module for the JA-60K control panel. The UC-216's X and Y output relays will have the same functions as the PgX and PgY programmable outputs of the control panel (see JA-60 installation manual for more details). The OUT output will indicate if the JA-60 system has any problem with power (low battery in items, failure of AC etc.).



To use the UC-216 with the control panel, all other items have to be erased from the UC-216's memory. The control panel can be enrolled the following way:

- enter the programming mode on the JA-60K
- select learning mode no. 1 for relay X in the UC-216
- enter the code 299 on the JA-60K keypad
- The UC-216 will automatically store the control panel's code in its memory
- exit the JA-60K's programming mode

Up to eight JA-60K control panels can be enrolled to each UC-216. After the first JA-60K is enrolled, no other item will be able to be enrolled other than additional JA-60K control panels.

### Erasing items from the UC-216's memory

All enrolled remote controls (or JA-60 items) can be erased from the UC-216's memory. Open the cover and press both setting buttons and hold them pressed until all indicators flash for a moment. The UC-216's memory will now be erased.

