AUTOROLL UK LTD

AR433 PLUS - TUBULAR MOTOR REMOTE CONTROL UNIT

For use with Autoroll 2 or 4 button handsets which can be used with up to 4 different receivers to control 4 doors independently.

· 230volt ac output for 1 single phase motor (1500w max)
· Opening/closing motor run time adjustment (18-135 seconds) by means of potentiometer (VD2)
· Pause time adjustment (15-130 seconds) by means of potentiometer (VD1) only when the unit is programmed for AUTO CLOSE.
· Output for flashing light or courtesy light 40W
· Input for key switch or momentary bell push button
· Built in self learning rolling code receiver (433MHZ)
· Dead Man function
· Auto –Close function.
· Function logic programmable through dip-switches.
· LED indication of travel direction: flashing = opening, constant = closing.
· 12-24 Volt ac output for photocells or other accessories

PLEASE READ THIS INSTRUCTION MANUAL VERY CAREFULLY BEFORE INSTALLING AND PROGRAMMING YOUR CONTROLL UNIT.
This instruction manual is only for qualified technicians who specialize in installations and automations.

AUTOMATION MUST BE IMPLEMENTED IN COMPLIANCE WITH THE EUROPEAN REGULATIONS IN FORCE:
EN 60204-1 (machinery safety, electrical equipment of machines, part 1; general rules)
EN12445 (safe use of automated locking devices, test methods)
EN12453 (safe use of automated locking devices, requirements)

CONNECTIONS.
The circuit board connections are numbered 1 to 16 and wires should be connected as follows:-

1. Mains power supply in 230volt **(BROWN WIRE)**
2. Neutral power supply **(BLUE WIRE)**
3. Earth – to be used to connect **both** earth wires **(GREEN / YELLOW WIRE)**
4. Connection to and from motor – neutral **(BLUE WIRE)**
5. Connection to and from motor - live 230volt **(BLACK OR BROWN WIRE) – see below**
6. Connection to and from motor - live 230volt **(BLACK OR BROWN WIRE) – see below**

If a photocell or other safety device is fitted and is stopping the door in the opening direction rather than the closing direction – swap the brown and black wires in terminals 5 & 6

7. & 8. Output for optional courtesy light 230volt – max. 40w (must not be linked to any other lighting circuit).
9. & 10. Output power supply 12-24volt for photocells or other accessories
11. Opening/closing control for the connection of momentary push button or key switch to terminal 13. (common-) Contact normally open. (LED Indicator D3)
12. STOP control. Must be looped to COMMON (-) Terminal 13 if not used. Contact normally closed (LED Indicator D2)
13. COMMON (-)
14. PHOTOCELL. Contact normally closed (LED Indicator D1) Must be looped to COMMON (-) Terminal 13 if not used.
15. Antenna shield (not used).
16. Antenna central cable (you can use a piece of 150mm cable - only if range is limited).

IMPORTANT! IF normally closed inputs, STOP (12) or PHOTOCELL (14) are not used, they each must be looped to terminal COMMON- (13) otherwise the unit will not operate!

PROGRAMMING OF NEW HANDSET TRANSMITTERS.
Press the small black button (S2) located at the top right hand corner of the circuit board, viewed with the connections at the bottom, until the red LED light illuminates. (approx. 2-5 seconds) Now press any of the 4 buttons on the handset transmitter and the LED will go out, then press the same button on the handset a second time and the LED will flash to confirm that the code has been memorized correctly.
If you wish for more than 1 button on the handset to work the same door, you must repeat the above for each button to work.

FUNCTION LOGIC
The logic of its function is STEP BY STEP; the first press of the transmitter triggers the opening, the second one triggers the stopping, the third the closing, the fourth the stopping and so forth.
If you wish to open or close the door within 130 seconds of the door stopping on its motor limits, it will be necessary to push the button on the transmitter twice, the first triggers the stop relay (although the door is stopped) the second triggers the start. (Or alternately reduce the motor run time.)

MOTOR RUN TIME
The motor run time can be reduced by inserting a 2mm Alan key into the potentiometer marked VD2 and turning it anti- clockwise. Be sure not to reduce it too far or the door will not fully open or close.

CLEARING CODE MEMORY.
Disconnect the power supply
Press the receivers (S2) small black programming button and at the same time re-connect the power supply. Still with the button depressed the receivers LED light will illuminate, and then wait until it starts to flash (approx 5 seconds) and then release the button. Once the light goes out the memory is now clear and ready for programming.

DIP SWITCH FUNCTION.
1. **LIGHT.** (If a light is not fitted please put dip switch to ON position, otherwise a constant clicking of the relays will be heard during opening and closing!)
ON - Courtesy light (2 minutes) **OFF -** Flashing light
2. **AUTOMATIC CLOSING.**
ON - Enabled (after timer) **OFF -** Disabled
3. **START DURING OPENING**
ON - Not received **OFF -** Received
4. **DEADMAN OPERATION. (Must be enabled as a hold to run if no safety device fitted).**
ON - Enabled **OFF -** Disabled
5. **PHOTOCELL** (If a photocell is fitted and the beam is crossed while the door is closed but before the motor run time has expired, the door will automatically re-open, it may be necessary to reduce the run timer).
ON - Enabled during opening **OFF -** Disabled during opening
6. **ROLLING CODE**
ON - Disabled **OFF -** Enabled

CONFORMITY TO REGULATIONS
Autoroll UK Ltd declares the AR 433 PLUS is accordance with the provisions of the directive 99/05/CE and with the standard reference here below;
EN 60335-1: ELECTRICAL SAFETY
EN 301489-3: ELECTROMAGNETIC COMPATIBILITY
EN 300220-3: OFFICIAL USE OF THE SPECTRUM.