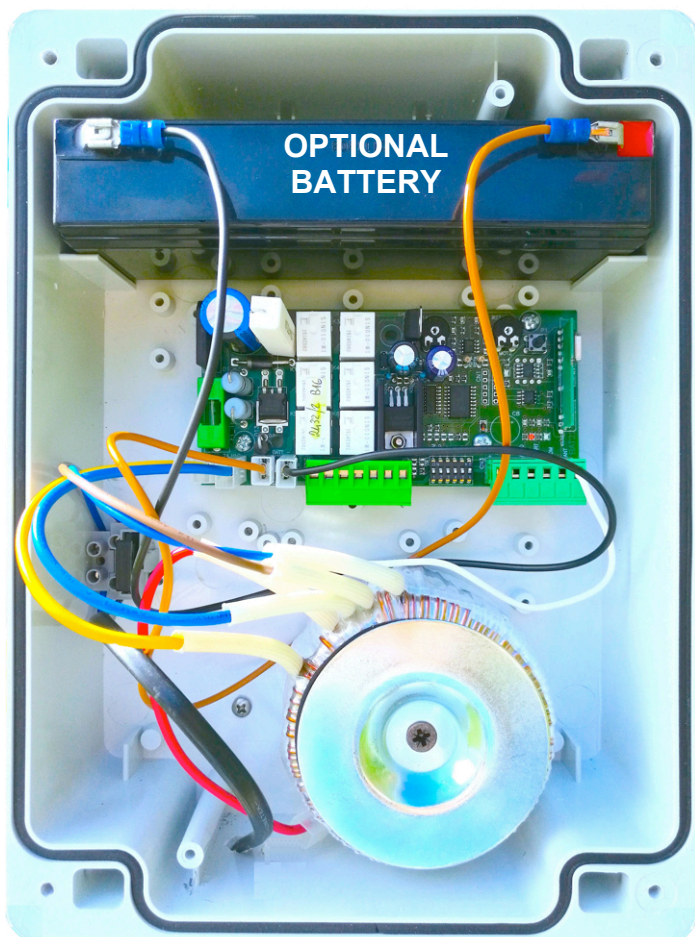


QK-CE24BAT110

Control board for 24V swing gate operators

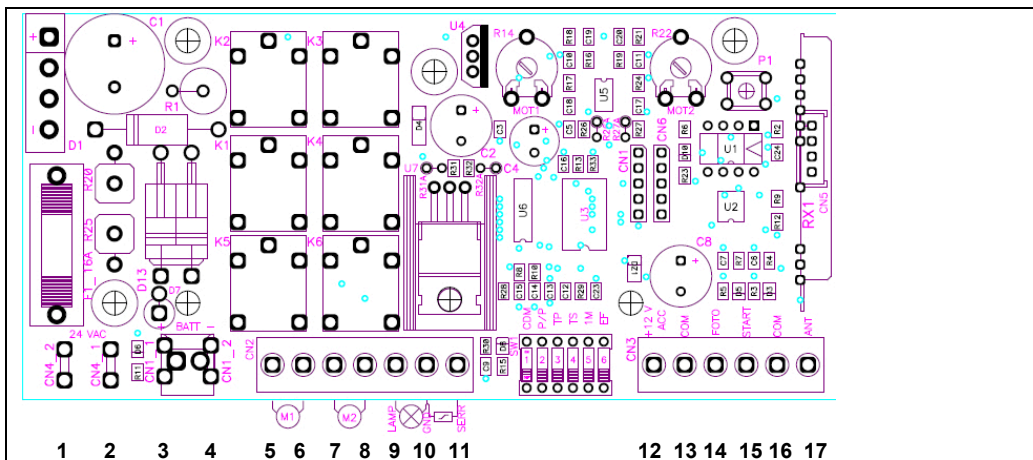
■ ■ MADE IN ITALY



USER MANUAL V01 Sw: 2432/2

Now with:

- Built in battery charger
- Built in electric lock module
- Apposite room for 12V 2.6Ah battery (optional QK-BATT26)



TECHNICAL CHARACTERISTICS

Power supply	24 AC, 100W	Operating time	120 sec.
No. of motors	2 x 24V	Pause time	15-60 sec.
Flash light	24V AC 10W max	Displacement time	3-10 SEC
Photocell power supply	12 V DC 8W max	Operating temperature	-30 +70 °C
Battery input	14V DC		

INSTALLATION NOTES

A) Before proceeding with installation, fit a magneto-thermal or differential switch upstream of the system with a maximum capacity of 10A. The switch must guarantee omni polar separation of the contacts with an opening distance of at least 3 mm.

B) Differentiate and keep the power cables (min cross-section 1.5 mm²) separate from the signal cables which may be 0.5 mm².

CONNECTIONS (TERMINAL BOARD LEGEND)

1	Input 0V AC	10	COMMON for NEGATIVE of flashing lamp and Electric lock
2	Input 20VAC	11	Electric lock output 12Vdc 15W
3	Battery positive input (red faston from battery)	12	Output 12V DC for power supply and accessories
4	Battery negative input (black faston from battery)	13	Common
5	Motor 1 + output	14	START input (NO)
6	Motor 2 - output	15	PHOTOCELL input (NC) (can be disabled with DIP6)
7	Motor 2 + output	16	COMMON and ANTENNA SCREEN
8	Motor 2 – output	17	ANTENNA SIGNAL
9	Flash light POSITIVE output 24V DC 10W max (relay flashes quickly during opening and slowly during closing).	18	

IMPORTANT: THE CONTROL BOARD WILL STOP THE MOTION OF THE GEARMOTORS WHEN THESE HAVE REACHED THE MECHANICAL LIMIT SWITCHES / GROUND STOPPERS AT THE END OF THE OPENING OR CLOSING MANOEUVRES

DIP SWITCH SETTING

DIP	ON	OFF
DIP1	(If DIP2 is in OFF) COMMUNITY MODE (after the first Start signal it doesn't accept other start signals during opening. A Start signal during pause causes a recharge of pause time) (If Dip2 is in ON) STEP BY STEP WITH AUTOMATIC CLOSING (a start signal during opening causes a stop. A start signal during pause causes a stop. A start signal during closing causes a re-opening)	RESIDENTIAL if DIP2 is in OFF.
DIP2	STEP BY STEP WITHOUT AUTOMATIC CLOSING (open-stop-close-stop-open...)	RESIDENTIAL (open-stop-close-open) After STOP, PAUSE or START from tx the gate closes automatically after pause time
DIP3	PAUSE time 60 seconds (function of rapid closing)	PAUSE time 15 seconds
DIP4	Displacement time 10 SEC	Displacement time 3 SEC
DIP5	1 motor functioning	2 motors functioning
DIP 6	Disables photocell input	Enables photocell input

OBSTACLE SENSING TRIMMERS AMPMOT1-AMPMOT2

By means of the trimmers AMPMOT1 and AMPMOT2 the intervention of the obstacle sensing of every motor can be adjusted. The intervention of the obstacle sensing stops the motion (moving the trimmers clockwise increases the strength necessary to obstacle sensing to stop the motion of the gate). If backup battery is being used, make sure to set the trimmers so that the system is stopping the gate properly when touching ground stoppers at the end of opening and closing manoeuvres.

FINAL CHECKS AND TESTING

Before powering the control unit, check the following:

- Check that the dip switches have been set correctly (by default ALL DIPs are OFF)
- Check the electrical connections; improper connection may cause damage to the control unit or the operator.
- **POWER THE DEVICE**
- Check that LEDs of the security devices are ON and LEDs START are OFF
- Check that when passing across the range of the photocells, the corresponding LED switches off.
- Check that the gate is closed and that the motors are locked and ready for operation. Remove any obstacles from the range of action of the gate.
- Power the device and pass to the code learning and the programming phase.

RADIO RECEIVER

The control unit version is supplied complete with receiver with an operating frequency of 433.92 MHz and it is fitted with a circuit for decoding Rolling-code remote controls (max. 200 codes).

LEARNING OF NEW CODES (to be carried out with closed gate):

Press once P1 button on control board, the programming LED switches on to indicate that the receiver is ready to learn the START key of a remote control. Now you can press one of the keys of a transmitter. The LED flashes once to indicate that the new code has been learned (if not, go first through the "memory reset" phase). Pressing again P1 button more remote controls can be learned one after the other.

MEMORY RESET

When all codes need to be deleted, press P1 button on control board (the red LED switches on) and keep it pressed until the LED switches off again. When the button is released the LED flashes 3 times (which indicates that the memory is empty) and now pressing P1 again, the system is ready to learn once again a remote control.

FAST RE-CLOSING FUNCTION (DIP3 = ON):

With this function you can reduce pause time to 3 seconds from intervention and clearing of the photocells. To enable this function set DIP3 in ON position

INCREASED PAUSE TIME (DIP 3= ON)

Putting in ON the DIP 3, pause time increases from 15 to 60 seconds

EMERGENCY BATTERY SETTINGS: Make sure to connect + and – of battery to the proper connectors fo control board: a wrong connection may damage the board. The control unit is equipped with battery charger. It can operate the system in case of emergency with only one 12V battery, and detect automatically when the system is battery operated (the microprocessor recognizes the emergency status and adapt to the situation, switches the flash light off in order to save energy and carry out about 10 cycles with a battery of 2,6Ah).

1 MOTOR FUNCTIONING (DIP 5=ON):

Putting In On the Dip 5 The Equipment Works With MOTOR 1 only

TROUBLESHOOTING

Before any installation or maintenance operation, ensure that the power supply has been cut !!

FAULT	POSSIBLE CAUSES AND SOLUTIONS
The operator does not open or re-close	Check if the safety LEDs are ON and the LED of START is OFF
LEDs START are always ON	Check that START input is connected to normally open contact
DIP remote control is learned but doesn't function properly	Check that at least two DIP are in ON position (both combination all ON and all OFF is not accepted for safety reasons)
Motor starts but stops immediately after	Check that trimmer AMPMOT1 and AMPMOT2 is not at its minimum level and that gate has not too much friction
The transmitter has a short range	Check that the antenna is positioned properly (screen = terminal 16, signal = terminal 17). Check that there are no sources of disturbance nearby which limit the range.

WARNINGS

During the connections the power supply must be switched off

The control unit must be used rigorously respecting the technical safety standards. Installation and/or maintenance must be carried out by qualified personnel in compliance with the provisions of the laws in force. The manufacturer cannot be held responsible for damage caused by improper and/or irrational use. A wrong installation or improper use of the products can compromise the safety of the unit. All materials have to be kept far from the children since they can be dangerous

EC DECLARATION OF CONFORMITY

(EEC directive 89/392, annex II, part B) the manufacturer declares that the product QK-CE24BAT is in conformity with EEC Directives 89/336/EEC, 92/31/EEC, 93/68/EEC on the electromagnetic compatibility and that following harmonised standards have been applied: EN60335-1, EN60204-1, EN55014, EN6100-3-2, EN 6100-3-3, EN 6100-4-2, EN 6100-4-4, ENV50140, EN50081-1, EN50082-1. Moreover the manufacturer declares that it is not permitted to operate the products until the machine in which they will be incorporated or of which they will become components has been identified and its conformity with the provisions set out in Directive 89/392 /EEC and the national legislation has been declared, i.e. until the products as set forth in this declaration form a single unit with the final machine.