

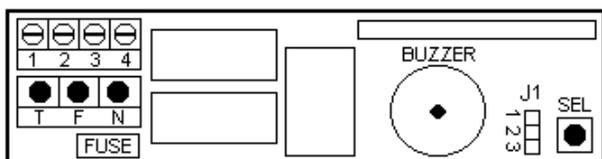
MC4 ELECTRONIC CONTROL UNIT

GB

An electronic control unit with incorporated radio receiver, for the remote operation of rolling window shutters, sun blinds and Venetian blinds. It may be used together with one or more radio controls for individual or centralised control (for the simultaneous manoeuvring of more than one piece of equipment).

TECHNICAL DATA

- Power supply:	230V~ 50/-60Hz 1.5W
- Motor output:	230V~ 500W Max.
- Operating temperature:	-10 to 70°C
- Radio receiver:	433,92 MHz
- Type of radio control:	12-18 Bit, BeFree Sx or Rolling Code
- Stored code capacity:	75 (with different codes)
- Container size:	102 x 27 x 23 mm
- Container:	ABS+PC V0 plastic
- Protection degree:	IP 65



CN1: CONTROL UNIT POWER SUPPLY CONNECTION

N - Blue - 230V line input ~ (Neutral)
F - Brown - 230V line input ~ (Phase)
T - Yellow/Green - Earth

CN2: MOTOR CONNECTION

1 - Yellow/Green - Earth
2 - Black - 230V motor output~ UPWARD MOVEMENT
3 - Blue - 230V motor output ~ SHARED
4 - Brown - 230V motor output~ DOWNWARD MOVEMENT

INITIAL OPERATING CONDITION

The device can only operate in conjunction with one or more radio controls; the central control unit contains no stored radio control codes when it is first used.

OPERATION USING DIFFERENT MODELS OF RADIO CONTROL

Different models of remote control may be programmed. By storing a code (one button) a cyclic step by step operation (Up-Stop-Down) may be achieved, and by storing two different codes (two buttons) different commands are produced (one for Up and one for Down). Storing three different codes (three buttons) produces three different commands: the first for Up, the second for Stop and the third for Down; it is also possible to programme the Venetian blind movement.

Operation using a 1-button radio control:

The following type of operation is obtained using a radio control with a single button: The first press controls the upward movement until the motor stops (the motor has a running time of around 3 minutes). The second press controls the downward movement of the shutter. If the button is pressed before the motor stops running, the control unit will stop the shutter moving and the button will need to be pressed again to reactivate the motor in the opposite direction.

Operation using a 2-button radio control:

By using a radio control with 2 buttons, the following processes may be carried out: the first button, "Up", controls the upward movement for about 3 minutes, until the motor has stopped running, and the second button ("Down") controls the downward movement of the shutter. If the upward movement is interrupted with another "Up" command, the motor will continue to run in the upward movement direction. If, however, the movement is interrupted with a "Down" command, the control unit will stop the motor.

The procedure remains the same for the downward movement phase.

Operation using a 3-button radio control (BeFree Series):

When using a radio control with 3 buttons, the following processes may be carried out: the Up button controls the upward movement until the motor stops running (3 minutes), the Stop button makes the shutter stop and the Down button controls the downward movement. If a stop command is sent during the upward or downward movement,

the control unit causes the shutter to stop. If, during upward or downward movement, a command is sent for the same direction, the control unit will keep the motor running.

If a command which is in the opposite direction to the current movement is sent during the upward or downward movement, the control unit will cause the shutter to change direction.

OTHER OPERATING MODES

Venetian Blind Operation:

In this operating mode, when the Up or Down button of a stored radio control is pressed for less than 2 seconds, the unit functions in the "user present" operating mode. It is possible, in this manner, to rotate the slats of the Venetian blind in one direction or the other in order to modulate the amount of light filtering through as desired. If the button on the radio control is pressed for longer than 2 seconds, the blind moves upwards or downwards depending on which button was pressed, until the motor stops running (the timer is set to approximately 3 minutes); if a Stop command is sent during upward or downward movement the control unit will stop the shutter movement completely. If, during upward or downward movement, a command is sent for the same direction, the control unit will keep the motor running.

If a command which is in the opposite direction to the current movement is sent during the upward or downward movement, the control unit will cause the shutter to change direction.

"User Present" Operation:

In this operating mode, the command used to control the motor of the blind (where the direction of movement depends on the button pressed) is constantly enabled. The movement stops when the control is released.

Operation with Indefinite Motor Running Time:

In this operating mode, the control unit is activated for an indefinite period of time when a button on the radio control is pressed, unless a further command is sent which leads to its deactivation.

GROUP OR GENERAL CENTRALISATION

It is also possible to enter two identical codes (buttons) from one radio control onto all the control units or a group of them which are situated at a maximum distance of 20 metres from the point of command, in order to obtain general or partial motion of more than one automation.

PROGRAMMING THE RADIO CONTROL

The transmission codes for a radio control may be programmed as follows:

Programming using a 1- or 2-button radio control:

press the "SEL" button (with the nib of a pen, for example) on the end of the box; you will hear three beeps confirming that the unit has now entered programming mode. Press the radio control button you wish to use for upward movement and hold it for 5 seconds, until the control unit emits a beep to confirm the operation has been carried out. Next, press the second radio control button which will be used for downward movement and hold it for 5 seconds, until the control unit beeps twice to confirm the operation has been carried out successfully. After one second, the control unit will beep another four times to signal the programming process is finished. If the second code is not set immediately after the first, the control unit will exit the programming mode and then emit four beeps to signal the programming process is complete. It will operate using only one code.

Programming using a 3-button radio control (BeFree Series):

press the "SEL" button (with the nib of a pen, for example) on the end of the box; you will hear three beeps confirming that the unit has now entered programming mode. Press the Up button on the BeFree series radio control, which will control the upward movement, and hold it for 5 seconds, until the control unit beeps to confirm this function has been set. After a second, the control unit will beep four times to signal that the programming process is complete.

PROGRAMMING WITH OTHER RADIO CONTROLS

The above programming operations can be repeated to enter further radio control codes - up to a maximum of 75 - in the control unit memory.

If the memory already contains 75 stored codes when you attempt the programming procedure, the control unit will beep six times to inform you that the memory is full.

INVERSION OF THE ROTATION MOTOR

If you notice that when pressing the (Up) key on the radio-control the control unit causes the shutter to move downwards instead of upwards, simply repeat the programming procedure pressing the (Down) key instead of the (Up) key, or invert the Upward movement wire and the Downward movement wire of the motor.

PROGRAMMING VENETIAN BLIND OPERATION

To activate this operating mode, move the jumper J1 (located on the board, inside the plastic container) from position 2-3 to position 1-2. Perform this procedure with the control unit disconnected from the 230 V electricity supply.

PROGRAMMING "USER PRESENT" BLIND OPERATION

To activate this operating mode, remove the jumper J1 (located on the board, inside the plastic container). Perform this procedure with the control unit disconnected from the 230 V electricity supply.

PROGRAMMING INDEFINITE MOTOR TIME

To set unlimited motor time proceed as follows: press and hold the SEL button while the control unit is connected to the electricity supply, until the control unit emits seven confirmation beeps. To restore the three-minute motor running time, repeat the operation described above or perform the Reset procedure.

RESET WITH THE "SEL" BUTTON

To restore the control unit to its default configuration, proceed as follows. press and hold the SEL button for 5 seconds, until the control unit beeps five times to confirm that the operation is complete.

BEEP SIGNALS

- 1 BEEP** = First radio control code stored.
- 2 BEEPS** = Second radio control code stored.
- 3 BEEPS** = Start of programming phase.
- 4 BEEPS** = End of programming phase.
- 5 BEEPS** = Restoration of default configuration.
- 6 BEEPS** = No more memory available for new codes.
- 7 BEEPS** = Motor running time programming.

FOR THE USER - IMPORTANT

- *The device should not be used by children or by individuals with reduced physical or psychological abilities unless supervision is provided or instruction given on how to operate it.*
- *Do not let children play with the device; keep radio controls out of their reach.*
- *CAUTION: Keep this instruction manual in a safe place and adhere to the important safety instructions contained within it. Non-adherence to these instructions may lead to property damage and serious accidents.*
- *Examine the system frequently to check for any signs of damage. Do not use the device if it needs to be repaired.*
- *If the wires have to be replaced (for the power supply or for the motor output), contact a qualified technician only.*

FOR THE INSTALLER - IMPORTANT

The control unit was designed to enable the installer to automate closure while adhering to the provisions set out by current legislation. Compliance with these obligations and the implementation of the minimum safety requirements is the responsibility of the installer. Once installation has been completed in full compliance with EN 60335-2-97 ("Household and similar electrical appliances - Safety", part 2 "Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment"), make sure that:

- *There are no accidental movements.*
- *There are no movements which were not requested caused by variations in the voltage and electricity supply.*
- *The force of impact at the main closure edge does not exceed:*
 - *25 N for more than 5 s*
 - *150 N for more than 0.5 s.*

If the latter provision is not satisfied, the "User Present" function can be used as an alternative, to obtain non self-holding release command operation. In this case the radio control must only be used while the user is in full view of the rolling device (perhaps fixing it to the wall would ensure this).

We also advise that you take note of the following recommendations:

- *For the radio receiver to operate correctly when two or more control units are used, we recommend that you install the devices at least 3 metres away from each other.*

- *The control unit is not equipped with a sectioning device. The installer is therefore responsible for the installation of a sectioning device in the system.*

Stateurop hereby declares that the product below:

MC4

Comply with the requirements of Directives R&TTE 99/5/EC, EMC 2004/108/EC, LVD 2006/95/EC.



STATEUROP sistemas automatizados para europa s.a.
Rua do Sobreiro, Lugar do Pinheiro Rio Covo, St.ª Eugénia Apto. 5018 EC Barcelos 4754-908