

QUICK KEY

user manual



Description

The Quick Key is a programmer for the WH, RD, GR, BL and ML controllers (*only the devices provided with the connector on the left side of the box*).

By the Quick Key (QK) it is possible to modify any parameter value and also update the entire software of the controller: the default setting of the QK is to read/write the parameter table. In order to program a controller, this must be disconnected from the main supply (the QK will supply directly the right voltage).

It is possible to copy the parameters values from a controller to another one, of the same family; simply by reading the first instrument and writing its values on the other controllers.



Usually the QK needs an external power supply: a battery pack (5Vdc) or an ac/dc adapter (230Vac/9Vdc).

Ac/dc adapter: 8.5 .. 13 Vdc 200mA; positive on the left pin, negative on the middle pin. Or
Battery pack: 5 V; negative on the middle pin; positive on the right pin.



The controllers with the 16A or the 30A relay have a female connector. In this case it is necessary using the connector adapter (*between the QK and the controller*).



On the left-side of the QK there is a standard RS-232 interface to connect it to a PC.

The PC software is a user-friendly interface to program a custom parameter table into the QK.

It is not necessary for the main functions of the QK.



The QK has two push buttons and one 2-color led (red, green light).

Left key: 1) to wake-up the QK (pushed short);
 2) the QK programs the data into the controller (pushed short).

Right key: 1) to verify the data values between the QK and the controller (pushed short);
 2) to read a controller and store the new table into the QK (pushed long).

Table of the led messages

Led message	Meaning	Description/Cause
sequence: red, orange, green	Restart of the QK software	After a power-on of the QK, or after an error occurred.
red	Operation in progress	The QK is working (programming, reading, ...).
3 times 3 red flash	Error	Some errors have been detected on the operation just completed.
3 green flash	Correct	The operation has been completed correctly.
3 series of green-red	Incompatible controller	The QK has a parameter table for a different model of the controller.
1 green flash	QK ready	After a wake-up, the QK is ready to work (for 10 seconds).
green	PC link established	The QK is ready to receive and transmit data through the RS-232 port with the PC.
3 red flash	Low battery	The QK detects a low voltage on its power supply.

To copy the parameters values from a controller to another one, it is necessary to read the values from the first instrument and store them into the QK memory. Then it is possible to program other controllers of the same family with the parameters just stored on the QK.



Disconnect the main power supply from the controller.

To read or program an instrument, connect the QK to its power supplier and then insert the QK on the controller's programming connector (*pay attention to insert the QK to the controller on the right side: the controller's label and the QK push buttons on the upper side – do not reverse it; it can damage the controller and the QK*).

How to read the parameter table from a controller

- 1) Connect the QK to the controller;
- 2) Push short the left key in order to wake up the QK (green flash, sometimes it can restart the program);
- 3) Push (long) and keep pushed the right key, as soon as the red led lights on, release the key;
- 4) Now the QK tries to find the password to read the parameter table from the instrument and then it will read the values (reading + short verify);
- 5) A 3-green flash states the operation is completed correctly and the parameters values of the controller are now stored into the QK memory. *It is possible to perform an accurate matching of the data just read and the controller values by pushing shortly the right key.*
- 6) Disconnect the QK from the controller.

The QK will go to a stand-by state after 10 seconds from the last operation (energy saving function).

How to program the parameter table to a controller

- 1) Connect the QK to the controller;
- 2) Push short the left key in order to wake up the QK (green flash, sometimes it can restart the program);
- 3) Push short the left key to program the data;
- 4) The QK tries to find the password to erase the old data on the controller and to store the new parameter table (writing + short verify);
- 5) A 3-green flash states the operation is completed correctly and the parameters value of the QK memory are now stored into the controller. *It is possible to perform an accurate matching of the data just written and the QK values by pushing shortly the right key.*
- 6) Disconnect the QK from the controller.

The QK will go to a stand-by state after 10 seconds from the last operation (energy saving function).

How to disable/enable the read controller function (lock/unlock the QK)

- 1) The QK must be connected only to the power supply (not to any controllers);
- 2) Push two times the left key (in order to do a software restart) and then push and keep pressed both keys;
- 3) After the sequence red, orange, green the led will switch off. Keep pressed both keys;
- 4) As soon as a green flash appears, release the left push button (keep pressed the right key);
- 5) The QK will flash red to indicate that the read function is disabled, release the right key. Or The QK will flash green to indicate that the read function is enabled, release the right key.