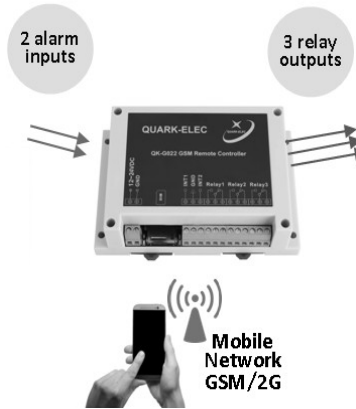


ADDING ADDITIONAL MOBILE NUMBERS

You can add up to three additional control mobile phones. When adding additional numbers to the unit you must enter them in the correct format used by the Network service provider of the SIM that you have entered into the G022. For example, if the UK number 07123456789 needs adding, we have three formats to try (Using the UK country code '44').

1. +447123456789 2. 00447123456789 3. 07123456789

The most commonly used, is format 1, this will work in most countries and providers. To store your number, text '**BD1+447123456789F**' to the device. If you are able to send commands from the new number but do not receive messages back, try one of the other formats.



QK-G022P (PIR version):

Batteries: The PIR device uses a 9.0V D-shape battery.

Location: Think about location of sensor and whether there is anything in between the PIR sensor and the G022P. Some obstructions will make the signal weaker for example metal structures and concrete walls.

The PIR acts as input 3 and will activate relay 3.

QK-G022G (GPS version):

Location: The GPS antenna cable length is 2 metres. The G022G device itself must be somewhere indoors and not exposed to a lot of water or high humidity.

Usage: The G022G controller has a built-in high performance GPS receiver module. This GPS receiver accurately provides position, velocity, and time readings.

By sending '**DQGPS**', the registered mobile terminal will receive a message which has the speed of the module and a web link similar like this: *****0.984Km#http://maps.google.com/maps?q=51.961718,-0.269798.**

In the message, 0.984km indicated the moving speed is 0.984km/h. And this link contains the position information of the QK-G022G. Open the link in any web browser, the Google map with the position icon will be displayed.

Disclaimer

It is the user's responsibility to use this product prudently. Neither Quark-elec, nor their distributors or dealers accept responsibility or liability either to the product user or their estate for any accident, loss, injury or damage whatsoever arising out of the use or of liability to use this product.

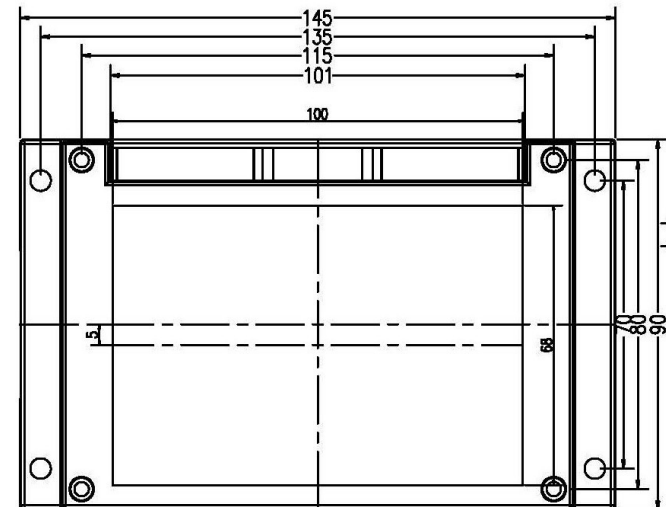
Email: info@quark-elec.com

Web: www.quark-elec.com

v1.1(2/19)

QK-G021/22 GSM REMOTE CONTROLLER

- What You Need
- Installation Overview
- Notes



All products are CE, RoHS certified
www.quark-elec.com

Please recycle your packaging





This is an overview only. Familiarize yourself with the manual and the manuals of any connecting devices before installation. It is always recommended that electronic equipment be installed by an experienced installer.

YOU WILL NEED:

1. SIM card:

- **SIM must operate on the GSM (2G) network for this 2G version.** Check with your SIM supplier.
- **Credit on the SIM (we recommend automatic top-ups)**
- **The SIM is not PIN protected**
- **The SIM is set to disable voicemail**
- **Avoid SIM cards that deactivate automatically if the SIM is not used often**

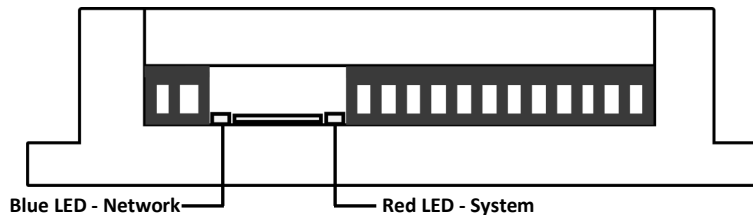
If your SIM will do this and if your G021/22 is likely to be unused for long periods of time, you will have to send the G021/22 an update request periodically to keep the SIM card active. The time limit is often three months, check with your operator.

2. Power supply cable: long enough to reach your device in its final location.

3. Check there is mobile network reception for your SIM card in the location that your device will be installed (you can check the SIM card in a mobile phone).

INSTALLATION

1. **Download and install the app** for mobile phones. <https://www.quark-elec.com/downloads/apps/>
2. **Select G021/22 location:** location must be indoors and not exposed to water or high humidity.
3. **Connect the relay output** (if required): check relay setup for whether you want relays in normal open (NO) or normal closed (NC) position.
4. **Connect alarm inputs** (if required) to the correct terminal: alarm inputs (INT) 1/2 will activate relay 1/2 respectively. The G022 is compatible with inputs that send signals as a switch (by closing the circuit) and alarm inputs that send a low voltage signal.
5. **Insert your SIM into the G021/22 device** (make a note of the SIM number first for reference).
6. **Connect to power:** Check LEDs are working correctly.



- **Red System LED:** will flash at 1 second intervals once the system has finished initialization. The LED will not flash while the G022 is processing a command.
- **Blue Network LED:** LED will flash blue at start up as it is connecting to a network. Once connected, the LED will flash much slower, approximately every 3 seconds. The network LED will flash at one second intervals once the registration is completed.

7. Register the main phone number that will control the device within 10 minutes of powering up the G021/22 by texting '888888' from your chosen phone to G021/22 SIM card. If registration is successful, the module will reply with 'Your phone has been registered'. If unsuccessful, the module will reply with 'registered disabled'. If registration is unsuccessful, repower the device and reattempt registration within 10 minutes of powering up the device.

You can add up to three additional control mobile phones (check next page)

OPERATION

You can now send commands and receive messages by SMS text or the text generating APP.

- Remember, the device processes one command at a time. Each command will have a reply to confirm the command has been received and executed. You must wait for a reply message before sending another command. **All SMS text commands must always be sent using CAPITAL letters. Do not add spaces or any other characters.**

Automated relay setting for relay 1/ 2 can be changed by adjusting the small jumpers inside the enclosure.

- **Self-lock control:** When activated, the relay will stay on until it receives a different command.
- **Latching control:** When activated, the relay will stay on for a period of seconds, determined by the user (3, 6, 9 or 12 seconds). It will then return to its normal state.



When an alarm is triggered, the relay will stay locked ON until you send the command "EXTRT" to reset alarm (even if set to latching mode).

QUICK COMMANDS

- **To turn relay on,** text 'DKYn' (replace 'n' with the relay number).
- **To turn relay off,** text 'GBYn' (replace 'n' with the relay number).
- **To run a relay for a short while,** text 'ONOFFRnxxx#'. Replace 'n' with the relay number (1 or 2) and replace 'xxx' with the delay times (from 001 to 999 seconds). This is a one off command and will not affect future actions.
- **To disable text alerts,** text 'EXTGGn' (replace 'n' with the relay number). This command disables the text alert, the external alarm input itself will remain active and will still activate the relay, unless the external alarm input itself is disabled.
To re-enable text alerts, text 'EXTKKn' (replace 'n' with relay number).
- **To disable the external alarm input,** text 'EXTGBn' (replace 'n' with the relay number).
To re-enable all external alarm inputs, text 'EXTRT'.
- **To change the SIM number of main control phone,** text 'XGZHM' from the current main control phone. The new phone must be registered within the next 10 minutes.
- **To add an additional mobile number,** text 'BDn(mobile number)F', replacing 'n' with '1', '2' or '3' according to a number of an additional mobile device.

Daily timer settings: Relays 1 and 2 support a daily timer function. This is useful for turning the relays on and off without having to message the device. The relays will switch ON/OFF daily according to the timer settings. Check the manual for further instructions.