

GSM Communicators

GC-36



GC-36

Congratulations on your purchase of the NIBBLE GC-36 GSM Communicator module!

The NIBBLE GC-36 module was developed taking into account security and remote maintenance needs. Therefore, the module can operate completely by itself providing remote maintenance functions, automatic output actuation (actuation on incoming call and on input changes) and automatic input alerts (SMS and audio).

The module allows for custom SMS and audio messages for each input, tamper and power supply status changes.

It is also possible to associate with each input state actuations on the outputs to provide basic functions like turning on a water pump when flooding is detected or activating a siren when an intrusion is detected.

It is also available the functionality to actuate on the outputs through phone calls allowing for an easy and costless way to activate outputs.

This guides briefly introduces you to the installation and configuration of the system, and the reading of the user manual is recommended. The manual can be found online at <http://www.nibble.pt/product/viewp/gc> as well as the application *GC Configurator*.

Contents:

- 1x GC-36;
- 1x Quickstart Guide (this document).

Connections scheme



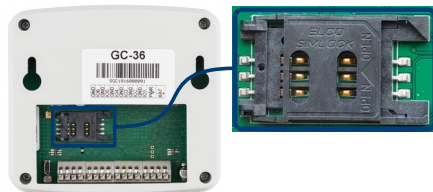
Terminal	Description
PWR	+12/32V
BAT	9V NI-MH
GND	Common ground
IO _N	Bidirectional input/output, 1 to 6

Technical Characteristics

- 2×16 LCD and capacitive keypad;
- 6 bidirectional input/outputs;
- Micro-USB;
- 150 users;
- SMS and voice message alerts for each input;
- Periodic test calls;
- Disarm code;
- Access levels 2 and 3;
- Output actuation with input changes:
- Output actuation with costless phone call;
- Tamper detection;
- Power supply failure detection;
- Internal antenna (optional external not included);
- Backup 9V battery Ni-MH (not included).

SIM Card Placement

- 1) On the back of the module, the SIM card slot is accessible;
- 2) Verify that the equipment is turned off during this process;
- 3) Slide the cover of the SIM connector and insert the SIM.



Make sure the SIM card does not have a PIN lock.

Installation

1

Previous configuration of desired functionality via *GC Configurator* or local interface.

3

Module installation on the wall. The wall must have grooves for the passage of cables and screws for fixing the module.

2

Battery installation. Optional.



4

Setting of the date and time. Tamper detection activation.

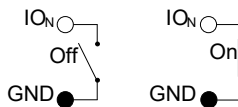
Bidirectional Inputs/Outputs

The module provides 6 bidirectional input/output terminals, accessible at terminals IO1 to IO6.

Each IO terminal is accompanied by a ground terminal to facilitate the connections and allows the application of voltage levels from 0V to 40V.

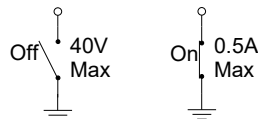
Inputs

The inputs are activated with a negative signal, that is, they are activated when a ground signal is applied in terminal IO. To operate the inputs, a dry contact must be used with one of the contacts connected to the adjacent ground terminal. No voltage should be applied to the inputs.

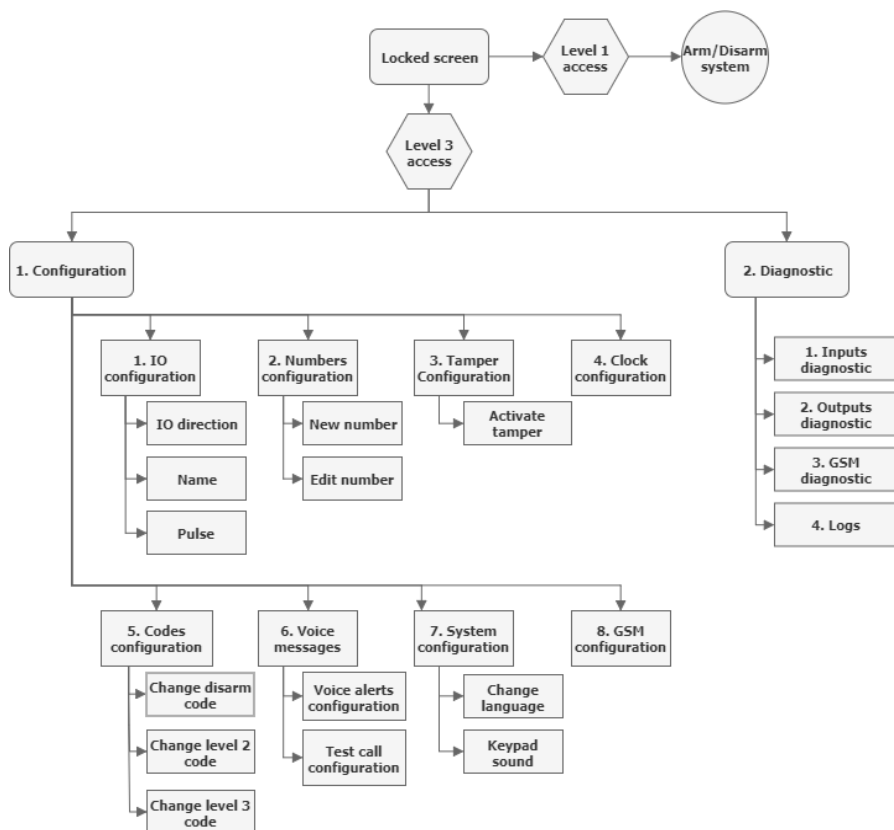


Outputs

The outputs function as an open collector. When activated they close the circuit to the ground and when deactivated they open the circuit. Each output allows up to 500mA of maximum current and 40V of voltage.



Local User Interface



The figure shows a navigation diagram of the menu.

From the lock screen, the user can:

- Arm the system by pressing the button with the lock symbol;
- Disarm the system by entering the disarm code (factory default 1234);
- Enter the configuration and diagnostic menus by pressing the OK button and entering the access code level 3 (factory default 123456);
- Check the current state of the system (power and battery status, system armed or disarmed and if you are making a call).

With level 3 access, the user has may enter the configuration and diagnostics menus.

In these menus the user can use the up and down arrows on the keypad and press the OK key to enter or directly press the number corresponding to the menu (e.g. pressing digit 2 and then digit 3 goes directly to the submenu GSM Diagnostic).

Diagnostic

After installation, the correct functioning of the module and the state of the connections must be checked.

Local user interface

Through the local interface, you can view the status of the module (see Installation Manual):

- GSM network status;
- Card balance on SIM card (country restriction);
- Status of inputs and outputs;
- Outputs actuations.

The installer should check the correct functioning of the module, verifying if it was able to register in the network. The network registration is confirmed by checking for GSM signal.

SMS

With an SMS command, you can also view details about the status of the module:

SMS command	Response SMS	Recommended/Typical
123456,ST	SIM card balance	Value in Euros (country restriction; if pre-paid card, value is 0€).
	GSM signal quality	Good or Very Good.
	IMEI	15 digits.
	Power supply status	On.
	Battery status	Varies with battery charge.

The first 6 digits in the SMS command are the level 3 access code.

SMS commands

Arm/Disarm System and inputs

SMS command	Field
[PIN],SS,[ARM],[IO]	PIN – Level 3 access code.
	ARM – Field to arm/disarm the system: <ul style="list-style-type: none">• A – Arm• D – Disarm
	IO – Index of input to arm/disarm, 1 to 6
Example: 123456,SS,A	Arms the complete system
Example: 123456,SS,A,1	Arms input 1
Example: 123456,SS	Checks system arm/disarm status

Outputs actuation

SMS command	Field
[PIN],IOO,[O],[A]	PIN – Level 2 or 3 access code.
	O – Index of output, 1 to 6.
	A – Output action: <ul style="list-style-type: none">L – On;D – Off;T – Switch;P – Positive pulse;N – Negative pulse;0 – No action;
Example: 123456,IOO,1, L	Activate output 1
Example: 123456,IOO	Check output status

Phonebook management – Add/remove number

SMS command	Field
[PIN],PA,[NUM] [PIN],PDN,[NUM]	PIN – Level 3 access code.
	NUM – Phone number to add (up to 16 characters)
Example: 123456,PA,919999999	Adds the phone number 919999999 to the empty slot
Example: 123456,PDN,919999999	Deletes phone number 919999999

Legal Conditions

Limited warranty

NIBBLE Engenharia, Lda. guarantees this product free of defects resulting from failures in the manufacturing process in any of its components according to the following terms:

Duration of warranty

The product has warranty for a period of two (2) years after the date of purchase. The replacement or repaired products under warranty will be covered by the remaining time of the original product warranty or for thirty (30) days, with the longest period being taken for this purpose.

Proof of purchase

The warranty liability on this product is subject to:

- Correct identification of the seller and the buyer, in the fields identified for this purpose, present in this document;
- Presentation of Receipt certifying the purchase of the product.

Who is protected?

This warranty may only be executed by the purchaser duly identified herein.

NIBBLE charges

NIBBLE will undertake the repair operation of components that are defective in manufacture under the warranty. However, it shall not undertake the following charges:

- Expenses with removal or installation of the product;
- Transport costs of the product;
- Any other non-product related expenses.

NIBBLE reserves the right to charge a handling fee in case the returned product does not meet the warranty conditions.

Deadlines

NIBBLE warrants replacement or repair within 30 days of receipt of the equipment. Defective material must be returned to NIBBLE (transportation fees paid by the sender).

Damages and losses

NIBBLE is not liable for damages or losses that may arise from the use of its products. NIBBLE's liability for any claim based on breach of contract, negligence, breach of any right or responsibility in the product shall not exceed the amount paid to NIBBLE for that product.

Warranty coverage

Except for the following items, this warranty covers all defects resulting from failures in the manufacturing process of this product. The following items are not covered by the warranty:

- Any product whose serial number is erased, modified, removed or disfigured;
- Any product whose warranty seal has been tampered with, damaged or removed;
- Damage caused by equipment connected to the product;
- Damage, deterioration or malfunction resulting from: Accident, abuse, misuse, neglect, fire, water, lightning or other phenomena of nature, commercial or industrial use, unauthorized modification of the product, or failure to follow the instructions for use of the product;
- Repair of the product by personnel not authorized by the manufacturer.
- Any damages incurred during transportation (complaints must be forwarded to the carrier).
- Any other cause that is not related to a defect in the product;
- Boxes, cartons, packaging and accessories used with the product;

NIBBLE does not warrant that this product meets your requirements; it is the user's responsibility to determine the suitability of the product for its intended purpose.

Exclusion of damages

The manufacturer's obligations and responsibilities under this warranty are limited to repairing or replacing a product that NIBBLE considers to be defective. The manufacturer shall not in any event be liable for any external incident or consequential damages (including, but not limited to, damages resulting from service interruption, loss of data, or loss of business) or liability in connection with this product or resulting from its use or possession.

Limitations on implied warranties

No warranties, expressed or implied, other than those set forth in this document, exist on the product.

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