

QCOM2.1

2016-0011

Operating Manual



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1 CONVENTIONS USED IN THIS MANUAL



CAUTION: This signal word indicates a possibly imminent danger, which can result in slight to serious injuries.



All sections / passages that are marked with this symbol describe procedures and / or conditions that could damage or lead to a malfunction of the device. Therefore, the user should pay particular attention.

2 SAFETY



CAUTION: QCOM2.1 is not meant to be used for any critical or production application.

3 PRODUCT DESCRIPTION

3.1 INTENDED USE

QCOM 2.1 is a program that offers a graphical user interface (GUI) to control lab automation instruments from QINSTRUMENTS, e.g. BioShake, ColdPlate, HeatPlate, Q1.

The main purpose of QCOM 2.1 is to get easy access to the unit to execute initial testing.

3.2 REQUIREMENTS

HARDWARE	
Minimal resolution [pixel]	800 x 600
USB connection	USB (type A) port version >= 2.0
Disc space	~30 MB (+ optional log file size)
OS	Tested with Windows 10 Professional (32/64-Bit)
NETWORK CONNECTION	-
USER RIGHTS	Write and Read access in the installation folder
DEVICE	Via USB connected BioShake / HeatPlate / ColdPlate / Q1 unit

4 INSTALLATION

Copy the QCOM 2.1 folder to the desired local drive.

Ensure that user has read and write access for the program folder.
Ensure enough disc space for log files is available if logging is activated.

5 OPERATION

5.1 INTRODUCTION

To start the program, execute QCOM2.1.exe.

By default, the program scans through the available COM ports and detects if a supported QINSTRUMENTS device is connected to that port.

The first valid device that is found is used, the scanning process is stopped, and the program starts using the identified device.

Device features will be detected at start-up, and the GUI will be adapted to the following features: mixing, ELM, temperature control.

At startup warnings will show up if

- the log directory size exceeds a certain value
- loading a specified configuration file is erroneous

5.2 START PARAMETER

It is not necessary to provide command line options. If no options are provided default values will be used. The QCOM2.1.bat file can be used to set and start QCOM2.1 with options.

-p <COM port number> example: QCOM2.1.exe -p com4

Use the defined com port instead of the first that is found.

-sn <serial number> example: QCOM2.1.exe -sn 5979

Search for a device with the serial number 5979 and use that instead of the first that is found. If no device with that serial number is found the program exits.

-c <file name> example: QCOM2.1.exe -c qcom2.cfg

With this parameter the location and name of a configuration file can be defined. The values in the file will be used instead of the default values.

The configuration file must be formatted using the JavaScript Object Notation (JSON).

An example should be available in the install directory.

Parameter	Description	Unit	Default value at start-up
set_speed	Shaker speed	Rpm	200
set_acc	Shaker acceleration	Seconds	2
set_temp	Shaker temperature	°C	30
set_time	Shaker time	Seconds	60

Configuration file example:

```
{
  "set_speed":    "300",
  "set_acc":      "5",
  "set_temp":     "-4.3",
  "set_time":     "60"
}
```

If there are errors in the format of the configuration file, the default values will be used.

-l example: QCOM2.exe -l

With this parameter logging is activated. Two logfiles will be generated in the folder log\

- QCOM2.1_start_[date].log Information regarding the GUI
- pyQControl_Kernel_[date].log Information regarding the device communication

-s <size number> example: QCOM2.1.exe -s 2

With this parameter the size of the GUI can be set. Three size values (0, 1, 2) are supported. The higher the number the bigger the GUI. The following width and height values can be set (in pixel).

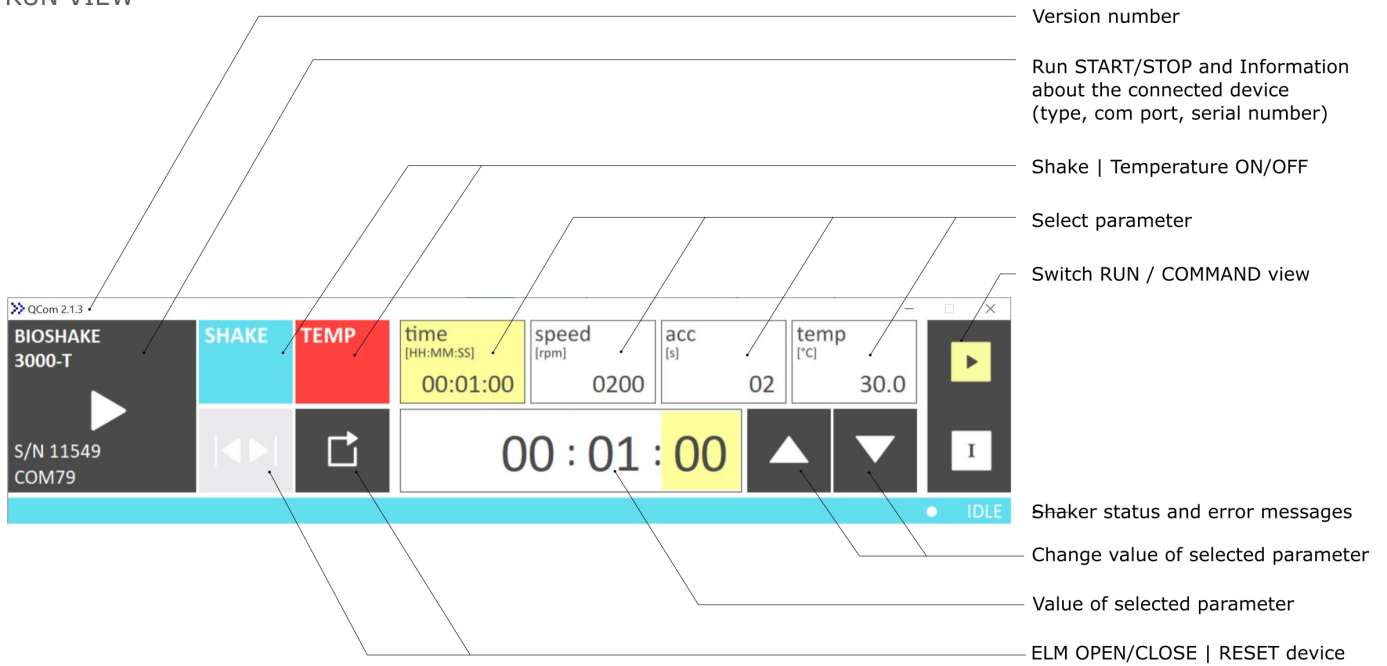
0 = 706x156 1 = 1059x234 2 = 2118x468

All options can be combined.

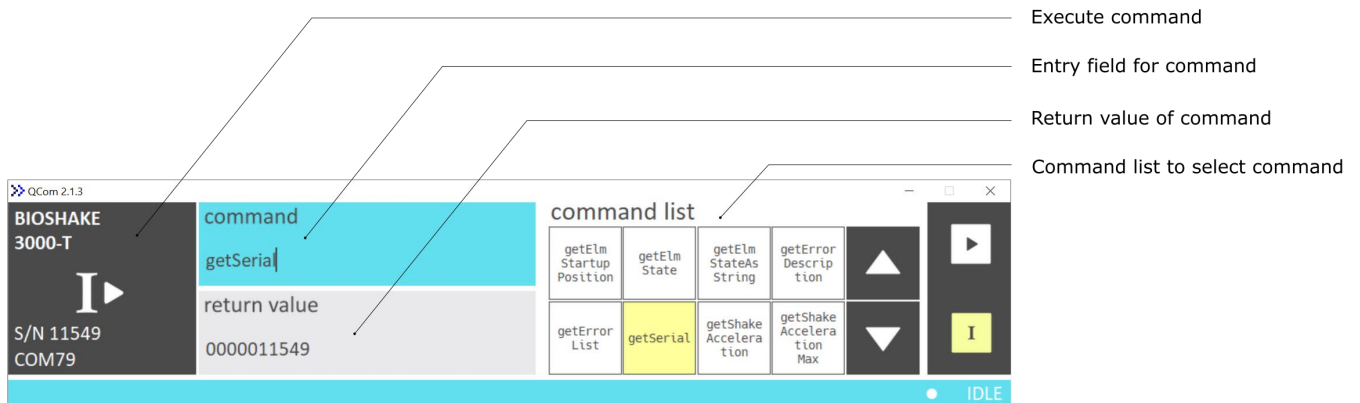
For example: QCOM2.exe -p com4 -c cfg\qcom2.cfg -l -s 2

5.3 GUI DESCRIPTION

RUN VIEW



COMMAND VIEW



SHORTCUTS

- 0 ... 9** Insert digit value
- ▲ ▼** Increase/Decrease value of digit
- ◀ ▶** Move to left/right digit of selected parameter
- SHIFT + ◀ ▶** Move to left/right parameter
- TAB** Move to right parameter

6 WARRANTY

QINSTRUMENTS warrants products manufactured by it to be free from defects in material or workmanship under normal use and service for a period of 2 years from date of shipment.

This warranty is specifically limited to the replacement or repair of any such warrantable defects, without charge, when the complete product is returned to QINSTRUMENTS, freight prepaid, at the address shown above. Contact the factory at the address above for a Return Material Authorization (RMA) number before returning the product.

QINSTRUMENTS shall be the sole judge of the warrant ability of alleged product defects. Products that are returned for warranty examination and that are found to be non-warrantable are chargeable and are returned freight collect. A copy of a purchase order with the amount of the charge must be received by QINSTRUMENTS, either by mail or by FAX, before any equipment is returned. Warrantable products are repaired or replaced at no charge and returned freight prepaid.

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The buyer acknowledges that he / she is not relying on the seller's skill or judgment to select or furnish goods suitable for any particular purpose and that there are no warranties that extend beyond the description on the face hereof.

This warranty extends only to the original purchaser and shall not apply to any products or parts that have been subject to misuse, neglect, accident, or abnormal conditions or operations. Claims for damage in transit are directed to the freight carrier upon receipt.

QINSTRUMENTS will only accept parts / devices for return that do not pose a threat to the health of our staff. In particular, the devices may not have been used in Biosafety Level 3 and 4 environments or have been exposed to radioactive or radiation materials. Such devices will not be accepted by QINSTRUMENTS for return.



Please use the online form for registration of your appliance and service:

www.qinstruments.com/service/

Your completed data will serve as registered certificate of guarantee for our extended guaranteeing and will assure optimal service.

Please keep your sales slip for a possible warranty case which must be presented then. Your personal data will not be given to third persons

7 SUPPORT

We provide a range of technical material (e.g., application notes, poster, bulletin, data sheets) that describes our products and key applications in detail. All of our technical documents are available on our web page in the corresponding product pages. Technical Data Sheet, Operation manual, 2D and 3D drawings and Software can be found in the download area of each product.

Please use the following link to our support form (<https://www.qinstruments.com/service/support/>) in case service or support for your product is needed. Please ensure to provide the serial number, as it is an important information for our support team. Direct contact via phone or email is also possible.

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WO2008135565, US8323588, EP2144716: Sample handling device for and methods of handling a sample
WO2011113858, US9126162, EP2547431: Positioning unit for a functional unit
WO2013113847, US10052598, EP2809436: Cog-based mechanism for generating an orbital shaking motion
WO2013113849, US9371889, EP2809435: Mechanism for generating an orbital motion or a rotation motion by inverting a drive direction of a drive unit
WO2014207243, US20160368003, EP3013480: Application-specific sample processing by modules surrounding a rotor mechanism for sample mixing and sample separation
WO002022128814A1: Laboratory apparatus comprising a fixing mechanism for fixing a slide
WO002022128809A2: Laboratory apparatus comprising a mixing mechanism for mixing a medium of a slide

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