

Varioshaker Revision B

TCP-Schnittstelle: Funktionsumfang



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TCP Protocol Overview

TCP Port: 6001

- Messages should be sent as string
- Each field should be separated by ';'
Message frame example: "id;param1;param2"
z.B: "1;1;10"
- All messages should start with function ID
- The reply from shaker will have at first field the function ID which it is replying + 100.
z.B: Message ID=1 will have a reply ID=101
- Return values could be:

TCP_WRONG_PARAMETERS = -1

-> TCP message came with too less or too much parameters.

TCP_REQUEST_OK = 1

-> Request OK. Task was performed.

TCP_MODE_DISABLED = 2

-> TCP mode is disabled at WebGUI settings.

TCP_PARAM_OUT_OF_RANGE = 4

-> One or more parameters is/are out of acceptable range.

TCP_WEB_LIGHT_LOCK = 8

-> Light was previously turned on via WebGUI.

TCP_WEB_OUTPUT_LOCK = 16

-> Clip, Sequence or Bunker is already running via WebGUI.

TCP_SLOT_UNDEFINED = 32

-> Request slot has no sequence saved on it.

Set lights

ID: 1

Parameters:

- state: Set the light ON or OFF
values: 0 = OFF
1 = ON
- level: Set the PWM level of light output.
NOTE: Works only if PWM is enabled, if not value 10 will be used.
values: 1 to 10, where 1 = lower PWM level and 10 = full PWM
- (optional)
duration: Set a timeout to turn light off after X seconds. Default value = 0
values: 0 = Unlimited
X>0 = Value in seconds
NOTE: Milliseconds are available from version 3.0.1

Return:

TCP_REQUEST_OK
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_LIGHT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Turn light on: "1;1;10"

Turn light on with 50% intensitivity and with timeout of 3.2 seconds: "1;1;5;3.2"

Turn light off: "1;0;10"

Set Bunker

ID: 2

Parameters:

- state: Set the bunker ON or OFF
values:
 0 = OFF
 1 = ON

- (optional)
duration: Set a timeout to turn bunker off after X seconds. Default value = 0
values:
 0 = Unlimited
 X>0 = Value in seconds

NOTE: Milliseconds are available from version 3.0.1

Return:

TCP_REQUEST_OK
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_OUTPUT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Turn bunker on for 5.1 seconds: "2;1;5.1"

Turn off bunker: "2;0"

Get version

ID: 3

Parameters:

- info: Describes which info should be sent
values: "VERSION" = returns current software version

Return:

Current software version in string format: "3.0.0"

TCP_PARAM_OUT_OF_RANGE

TCP_MODE_DISABLED

TCP_WRONG_PARAMETERS

Example:

Request software version: "3;VERSION" -> "103;3.0.0"

Get status

ID: 4

Parameters:

There are no parameters for this function

Return:

1 if Ready pin is set to TRUE

0 if Ready pin is set to FALSE

TCP_MODE_DISABLED

TCP_WRONG_PARAMETERS

Example:

Request current Shaker state: "4"

Run sequence (run sequence just once)

ID: 5

Parameters:

- slot: Slot number which should be played
values: 1..31 = Slot number

Return:

TCP_REQUEST_OK
TCP_SLOT_UNDEFINED
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_OUTPUT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Play sequence on slot 23: "5;23"

Play sequence (run sequence in loop mode)

ID: 6

Parameters:

- slot: Slot number which should be played
values: 1..31 = Slot number

Return:

TCP_REQUEST_OK
TCP_SLOT_UNDEFINED
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_OUTPUT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Play sequence on slot 23: "5;23"

Stop Playing (works for sequence or clip)

ID: 7

Parameters:

There are no parameters for this function

Return:

TCP_REQUEST_OK
TCP_WEB_OUTPUT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Stop current Sequence or Clip (started via TCP): "7"

Set Clip (this will not start a clip, just set all values)

ID: 8

Parameters:

- freq: Value for output frequency
values: 0.50...100.00 (Hz)
- amp1: Value for Channel's 1 amplitude
values: 0...100 (%)
- phs1: Value for Channel's 1 phase
values: 0...360 (°)
- amp2: Value for Channel's 2 amplitude
values: 0...100 (%)
- phs2: Value for Channel's 2 phase
values: 0...360 (°)
- amp3: Value for Channel's 3 amplitude
values: 0...100 (%)
- phs3: Value for Channel's 3 phase
values: 0...360 (°)
- amp4: Value for Channel's 4 amplitude
values: 0...100 (%)
- phs4: Value for Channel's 4 phase
values: 0...360 (°)

NOTE: All params values will be "clipped" to fit inside valid ranges.

This means: If value is higher than max, then max value will be used.
If value is lower than min, then min value will be used

Return:

TCP_REQUEST_OK
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_OUTPUT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Set a clip with Frequency = 88.65Hz

Channel 1 Amplitude = 20%

Channel 1 Phase = 0°

Channel 2 Amplitude = 30%

Channel 2 Phase = 90°

Channel 3 Amplitude = 40%

Channel 3 Phase = 180°

Channel 4 Amplitude = 50%

Channel 4 Phase = 270°

"8;88.65;20;0;30;90;40;180;50;270"



Start Clip (with previosly set values)

ID: 9

Parameters:

There are no parameters for this function

Since version 3.0.1:

- (optional)
duration: Set a timeout to turn light off after X seconds. Default value = 0
values: 0 = Unlimited
 X>0 = Value in seconds

NOTE: Milliseconds are available from version 3.0.1

Return:

TCP_REQUEST_OK
TCP_WEB_OUTPUT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Start clip using previosly set values: "9"

Start clip using previosly set values with timeout of 2.5 seconds: "9;2.5"

Set Backlight (version 3.0.1)

ID: 10

Parameters:

- state: Set the light ON or OFF
values: 0 = OFF
 1 = ON
- level: Set the PWM level of light output.
NOTE: Works only if PWM is enabled, if not value 10 will be used.
values: 1 to 10, where 1 = lower PWM level and 10 = full PWM
- (optional)
duration: Set a timeout to turn light off after X seconds. Default value = 0
values: 0 = Unlimited
 X>0 = Value in seconds

Return:

TCP_REQUEST_OK
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_LIGHT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Turn light on: "10;1;10"

Turn light on with 50% intensitivity and with timeout of 3 seconds: "10;1;5;3"

Turn light off: "10;0;10"

Set Toplight (version 3.0.1)

ID: 11

Parameters:

- state: Set the light ON or OFF
 - values: 0 = OFF
 - 1 = ON
- (optional)
 - duration: Set a timeout to turn light off after X seconds. Default value = 0
 - values: 0 = Unlimited
 - X>0 = Value in seconds

Return:

TCP_REQUEST_OK
TCP_PARAM_OUT_OF_RANGE
TCP_WEB_LIGHT_LOCK
TCP_MODE_DISABLED
TCP_WRONG_PARAMETERS

Example:

Turn light on: "11;1"
Turn light on with timeout of 3.2 seconds: "11;1;3.2"
Turn light off: "11;0"

