

TAGARNO

Microscope API Documentation

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TAGARNO makes several data and control APIs available for consumption on a local area network. Access to these APIs is granted through a licensed subscription service.

This document describes the TAGARNO microscope API.

Security

It is recommended to perform a security analysis of the local network and restrict access accordingly to prevent unauthorized access to the microscope.

Protocol

The API is based on [JSON-RPC version 2.0](#).

Server

The microscope should be provided with a static IP address by the IT department maintaining the local area network.

The IP address will serve as the request URL.

Request

All requests made towards the microscope must conform to the following:

- Request type: **POST**
- Contain a header with key/value pair **Content-Type: application/json**
- Listed parameters must be given **In-Order** as specified.
- String parameters are **case sensitive**

It is recommended to use a tool like Postman to test the API.

Test an endpoint using Postman

1. [Download](#) and install Postman.
2. Open Postman.
3. Insert the Content-Type header.
4. Create a new POST request.
5. Copy-paste the example requests URL into Postman.
6. Edit the IP address to match your microscope IP address.
7. Press Send.

Response

All successful responses will be returned with the HTTP status code 200 OK and the body will contain a key/value pair "result": "<requested value>".

All failing responses will be returned with the HTTP status code 400 Bad Request and the body will contain an error response.

If the header content-type is not provided in the header, the socket will hang up.

Below are examples of generic error responses.

Method not found

Method not found be returned if the method parameter is not found in the microscope.

```
{
  "jsonrpc": "2.0",
  "error": {
    "code": -32601,
    "message": "Method not found"
  },
  "id": null
}
```

Parse error

Parse error will be returned if any required parameter is missing given in incorrect format, type or order.

```
{
  "jsonrpc": "2.0",
  "error": {
    "code": -32700,
    "message": "Parse error"
  },
  "id": null
}
```

Internal error

Internal error will be returned if an unexpected state is encountered.

Note: id might be null in some cases.

```
{
  "jsonrpc": "2.0",
  "error": {
    "code": -32603,
    "message": "Internal error"
  },
  "id": 5049231
}
```

Invalid params

Invalid params will be returned if a given parameter is out of range.

```
{
  "jsonrpc": "2.0",
  "error": {
    "code": -32602,
    "message": "Invalid params"
  },
  "id": null
}
```


Methods

This section will describe the sunny scenarios of a request. Every request could potentially return the errors described above.

Parameters must be provided in-order.

Microscope Serial Number

Request the serial number of the microscope.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getSerial	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.124/?jsonrpc=2.0&method=getSerial&id=5049231

Response

If successful, the body will contain "result": "<serialNo>" as an integer value.

Example

```
{
  "jsonrpc": "2.0",
  "result": 33580,
  "id": 5049231
}
```

Microscope Application Version

Request the application version of the microscope.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getVersion	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getVersion&id=5049231

Response

If successful, the body will contain "result": "<version>" as a number value.

Example

```
{
  "jsonrpc": "2.0",
```

```

    "result": 6.11,
    "id": 5049231
}

```

Get Field of View

Request the current horizontal field of view in μm .

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getFieldOfView	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getFieldOfView&id=5049231

Response

If successful, the body will contain "result": "<FOV>" as an integer value.

Example

```

{
  "jsonrpc": "2.0",
  "result": 159018,
  "id": 5049231
}

```

Set Field of View

Adjust zoom to accommodate the requested horizontal field of view.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	setFieldOfView	string	Method to call.
params	<integer value>	integer	Desired field of view in μm .
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setFieldOfView¶ms=200&id=2563

Response

If successful, the body will contain "result": "<FOV>" as an integer value equal to the params value.

If the given params value is smaller or larger than the range of the microscope (lens depended) the microscope will obtain the end position and return the params value in the result.

Example

```
{
  "jsonrpc": "2.0",
  "result": 20000,
  "id": 2563
}
```

Recall Preset

Recall a preset from the Preset manager.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	recallPreset	string	--		Method to call.
params	<integer value>	integer	1	10	Desired preset number.
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=recallPreset¶ms=2&id=100

Response

If successful, the body will contain "result": "<preset no.>" as an integer value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": 2,
  "id": 100
}
```

Capture Image

Capture a still image from the camera and return in the requested format.

It is possible to get the image as bmp, tiff, png, and jpg. The format must be provided in the params.

The returned image is base64 encoded.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getImage	string	Method to call.
params	< [bmp, tiff, png, jpg] >	string	Desired image format.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getImage¶ms=jpg&id=100

Response

If successful, the body will contain "result": "<base64 img.>" a base64 encoded image.

Example

```
{
  "jsonrpc": "2.0",
  "result": "base64_img",
  "id": 100
}
```

Set Zoom Direct

Low level call to camera sets the zoom level.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setZoomDirect	string	--		Method to call.
params	<hex value>	string	0x0000	0x4000	Desired zoom as hex string.
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setZoomDirect¶ms=0x1000&id=100

Response

If successful, the body will contain "result": "<hex value>" as a string value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "0x1000",
  "id": 100
}
```

Get Zoom Direct

Request the current zoom directly from the camera module.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getZoomDirect	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getZoomDirect&id=49231

Response

If successful, the body will contain "result": "<hex value>" as a string value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "0x1000",
  "id": 49231
}
```

Set Focus Direct

Low level call to camera.

This method will disable auto focus

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setFocusDirect	string	--		Method to call.
params	<hex value>	string	0x1000	0xE200	Desired focus as hex string.
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setFocusDirect¶ms=0x1500&id=100

Response

If successful, the body will contain "result": "<hex value>" as a string value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "0x1500",
  "id": 100
}
```

Get Focus Direct

Request the current focus directly from the camera module.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getFocusDirect	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getFocusDirect&id=49231

Response

If successful, the body will contain "result": "<hex value>" as a string value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "0x1500",
  "id": 49231
}
```

Get Autofocus Mode

Request the current focus mode.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getAutoFocusMode	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getAutoFocusMode&id=49231

Response

If successful, the body will contain "result": "<integer>" as an integer value.

0 = Manual mode, 1 = Auto Focus Mode

Example

```
{
  "jsonrpc": "2.0",
  "result": 0,
  "id": 49231
}
```

Set Autofocus Mode

Sets the autofocus mode.

0 = Manual mode, 1 = Auto Focus Mode

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setAutoFocusMode	string	--		Method to call.
params	<integer>	integer	0	1	Desired autofocus mode as integer value.
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setAutoFocusMode¶ms=1&id=100

Response

If successful, the body will contain "result": "<integer>" as an integer value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": 1,
  "id": 100
}
```

Set Auto Exposure Mode

Sets the auto exposure mode.

0 = Manual mode, 1 = Auto Focus Mode

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setAutoExposureMode	string	--		Method to call.
params	<integer>	integer	0	1	Desired auto exp. mode as integer value.
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setAutoExposureMode¶ms=1&id=100

Response

If successful, the body will contain "result": "<integer>" as an integer value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": 1,
  "id": 100
}
```

Get Auto Exposure Mode

Request the current exposure mode.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getAutoExposureMode	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setAutoExposureMode¶ms=1&id=100

Response

If successful, the body will contain "result": "<integer>" as an integer value.

0 = Manual mode, 1 = Auto Exposure Mode

Example

```
{
  "jsonrpc": "2.0",
  "result": 1,
  "id": 49231
}
```

Set Exposure Compensation

Set Exposure Compensation.

Note that setting this value will activate Auto exposure mode.

The param must be given as a sting in the specified range below, in steps of 1.5dB. E.g. "-4.5dB" or "-3dB"

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setExposureCompensation	string	--		Method to call.
params	<string>	string	-10.5dB	10.5dB	Desired exp. comp.
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setExposureCompensation¶ms=-3dB&id=100

Response

If successful, the body will contain "result": "<string>" as a string value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": 1,
  "id": 100
}
```

Get Exposure Compensation

Request the current exposure compensation.

Note a value is returned even if Auto Exposure mode is off

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getExposureCompensation	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getExposureCompensation&id=49231

Response

If successful, the body will contain "result": "<string>" as a string value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "3dB",
  "id": 49231
}
```

Set Manual Iris

Set manual Iris value.

This feature is only supported in manual exposure mode, which must be set by the client before calling this method. If not set, an internal error is returned.

The param must be given as a sting in the specified range:

[CLOSED, F14, F11, F9.6, F8, F6.8, F5.6, F4.8, F4, F3.4, F2.8, F2.4, F2, F1.6]

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	setManuallIris	string	Method to call.
params	<string>	string	Desired iris value
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setManuallIris¶ms=F1.6&id=100

Response

If successful, the body will contain "result": "<string>" as a string value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "F1.6",
  "id": 100
}
```

}

Get Manual Iris

Request the current manual Iris value.

This feature is only supported in manual exposure mode. If the microscope operates in auto exposure mode, an internal error is returned.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getManualIris	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getManualIris&id=49231

Response

If successful, the body will contain "result": "<string>" as a string value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "F2",
  "id": 49231
}
```

Set Manual Gain

Set manual gain value.

This feature is only supported in manual exposure mode, which must be set by the client before calling this method. If not set, an internal error is returned.

The param must be given as a sting in the specified range:

[0dB, 3.4dB, 6.8dB, 10.2dB, 13.7dB, 17.1dB, 20.5dB, 23.9dB, 27.3dB, 30.7dB, 34.1dB, 37.5dB, 41dB, 44.4dB, 47.8dB]

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	setManualGain	string	Method to call.
params	<string>	string	Desired gain value
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setManualGain¶ms=3.4dB&id=100

Response

If successful, the body will contain "result": "<string>" as a string value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "3.4dB",
  "id": 100
}
```

Get Manual Gain

Request the current manual gain value.

This feature is only supported in manual exposure mode. If the microscope operates in auto exposure mode, an internal error is returned.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getManualGain	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getManualGain&id=49231

Response

If successful, the body will contain "result": "<string>" as a string value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "3.4dB",
  "id": 49231
}
```

Set Manual Exposure Time

Set manual exposure time.

This feature is only supported in manual exposure mode, which must be set by the client before calling this method. If not set, an internal error is returned.

The param must be given as a sting in the specified range:

[1/1s, 1/2s, 1/4s, 1/8s, 1/15s, 1/30s, 1/60s, 1/90s, 1/100s, 1/125s, 1/180s, 1/250s, 1/350s, 1/500s, 1/725s, 1/1000s, 1/1500s, 1/2000s, 1/3000s, 1/4000s, 1/6000s, 1/10000s]

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.

method	setManualExposureTime	string	Method to call.
params	<string>	string	Desired exposure time
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setManualExposureTime¶ms=1/100s&id=100

Response

If successful, the body will contain "result": "<string>" as a string value equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "1/100s",
  "id": 100
}
```

Get Manual Exposure Time

Request the current manual exposure time.

This feature is only supported in manual exposure mode. If the microscope operates in auto exposure mode, an internal error is returned.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getManualExposureTime	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getManualExposureTime&id=49231

Response

If successful, the body will contain "result": "<string>" as a string value.

Example

```
{
  "jsonrpc": "2.0",
  "result": "1/100s",
  "id": 49231
}
```

Execute White Balance Calibration

Request execution of white balance calibration.

Note: Have a grey card or white piece of paper in the field of view

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	executeWhiteBalanceCalibration	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=executeWhiteBalanceCalibration&id=49231

Response

If successful, the body will contain "result": **null**

Note: the returned result will be **null**.

Example

```
{  
  "jsonrpc": "2.0",  
  "result": null,  
  "id": 49231  
}
```

Get Contrast

Request the position of the Contrast slider in Advanced camera settings.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getContrast	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getContrast&id=49231

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": 1
  "id": 49231
}
```

Set Contrast

Set the position of the Contrast slider in Advanced camera settings.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string			Json-rpc version.
method	setContrast	string			Method to call.
params	<integer value>	integer	-10	10	Desired position
id	<integer value>	integer			Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setContrast¶ms=-2&id=49232

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": -2
  "id": 49232
}
```

Get Saturation

Request the position of the Saturation slider in Advanced camera settings.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getSaturation	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getSaturation&id=49233

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": 1
  "id": 49233
}
```

Set Saturation

Set the position of the Saturation slider in Advanced camera settings.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string			Json-rpc version.
method	setSaturation	string			Method to call.
params	<integer value>	integer	-10	10	Desired position
id	<integer value>	integer			Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setSaturation¶ms=3&id=49234

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": 3
  "id": 49234
}
```

Get Sharpness

Request the position of the Sharpness slider in Advanced camera settings.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getSharpness	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getSharpness&id=49235

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": 1
  "id": 49235
}
```

Set Sharpness

Set the position of the Sharpness slider in Advanced camera settings.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string			Json-rpc version.
method	setSharpness	string			Method to call.
params	<integer value>	integer	-10	10	Desired position
id	<integer value>	integer			Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setSharpness¶ms=-2&id=49236

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": -2
  "id": 49236
}
```


Get Noise Reduction

Request the position of the Sharpness slider in Advanced camera settings.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getNoiseReduction	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getNoiseReduction&id=49235

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": 3
  "id": 49235
}
```

Set Noise Reduction

Set the position of the Noise reduction slider in Advanced camera settings.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string			Json-rpc version.
method	setNoiseReduction	string			Method to call.
params	<integer value>	integer	0	5	Desired position
id	<integer value>	integer			Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setNoiseReduction¶ms=0&id=49236

Response

If successful, the body will contain "result": <integer>

Example

```
{
  "jsonrpc": "2.0",
  "result": 0
  "id": 49236
}
```

Get White Balance Calibration

Request red and blue calibration gain values.

Parameters

Key	Value	Type	Description
jsonrpc	2.0	string	Json-rpc version.
method	getWhiteBalanceCalibration	string	Method to call.
id	<integer value>	integer	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=getWhiteBalanceCalibration&id=49231

Response

If successful, the body will contain "result": {"rGain" : <integer>, {"bGain" : <integer>} as integer values

Example

```
{
  "jsonrpc": "2.0",
  "result": {
    "rGain": 189,
    "bGain": 199
  },
  "id": 49231
}
```

Set White Balance Calibration

Sets red and blue calibration gain values.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setExposureCompensation	string	--		Method to call.
params	{rGain":<integer>, "bGain":<integer>}	String:Integer	0	255	Desired red gain
		String:Integer	0	255	Desired blue gain
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setWhiteBalanceCalibration¶ms={"rGain":94, "bGain":74}&id=100

Response

If successful, the body will contain "result": {"rGain" : <integer>, {"bGain" : <integer>} equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": {
    "rGain": 94,
    "bGain": 74
  },
  "id": 100
}
```

Set Ring Light

Sets individual ring light settings.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setRinglight	string	--		Method to call.
params	{"intensity": [0-255], "center": [0-15], "segments": [1-16]}	String:Integer	0	255	Desired intensity
		String:Integer	0	15	Desired center rotation
		String:integer	1	16	Desired segments
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST 192.168.1.94/?jsonrpc=2.0&method=setRinglight¶ms={"intensity": 130,"center": 15,"segments": 10}&id=100

Response

If successful, the body will contain "result": {"intensity": 130, "center": 15, "segments": 10} equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": {
    "intensity": 130,
    "center": 15,
    "segments": 10
  },
  "id": 100
}
```

Set Ring Light Direct

Set all segments with individual intensity setting.

Parameters

Key	Value	Type	Min.	Max.	Description
jsonrpc	2.0	string	-	-	Json-rpc version.
method	setRinglightDirect	string	--		Method to call.
params	[S ₁ ,S ₂ ,S ₃ ,...S ₁₅ ,S ₁₆]	array	0	255	Individual light intensity for segment 1-16
id	<integer value>	integer	-	-	Provide a self-chosen integer to identify the request - is returned with the response.

Request example

POST

```
192.168.1.94/?jsonrpc=2.0&method=setRinglightDirect&params="[0,255,0,255,0,255,0,255,0,255,0,255,0,255,0,255]"&id=100
```

Response

If successful, the body will contain "result": {"params": [0,255,0,255,0,255,0,255,0,255,0,255,0,255,0,255]} equal to the params value.

Example

```
{
  "jsonrpc": "2.0",
  "result": {
    "params": [0,255,0,255,0,255,0,255,0,255,0,255,0,255,0,255]
  },
  "id": 100
}
```