Govee Developer API

Reference

Version 1.7
(this version will be online after May 4)

You can always get the latest API guide through the link below:

https://govee-public.s3.amazonaws.com/developer-docs/
GoveeDeveloperAPIReference.pdf

Govee Team

Table of Contents

F&Q

1. I have a Bluetooth device. It does not support Wi-Fi. If there is available API?

No, only Wi-Fi devices support API.

2. When I use Govee Home APP to control the brightness of the device, the API will not display the changed status.

The changed status can only be synchronized when the lights is controlled via Wi-Fi, which means your phone Bluetooth needs to be turn off. Please recheck if you have turned off your phone Bluetooth.

3. I have a problem using a 3rd party software，I am not a developer, can you solve the problem with a 3rd party software.

We do not have the supported 3rd party software, who use our API to integrate; Since we do not involved in it, so we could not diagnose the issue and solve the problem.It is advised to contact the 3rd party support directly to solve the problem.

4.How to refresh the API key?

Govee Developer API Key can be applied through Govee Home App, the key is refreshed every time you apply, and will be sent to the email address.

5.What can I do if the response status is not 200?

Please read the "message" in the Response Body first. If you still have question, please send us your Request Params and the value of "Date" and "X-traceId" showed in the Response Header, which are more helpful for the debug

Getting Started with the Govee Developer API

Use the Govee Developer API to control your devices and query your device state.

The device models supported by the current version are:
H6160, H6163, H6160, H6163, H6104, H6109, H6110, H6117, H6159, H7022, H6086, H6089, H6182, H6085, H7014, H5081, H6188, H6135, H6137, H6141, H6142, H6195, H7005, H6083, H6002, H6003, H6148, H6052, H6143, H6144, H6050, H6199, H6054, H5001, H6154, H6072, H6121, H611A, H5080, H6062, H614C, H615A, H615B, H7020, H7021, H614D, H611Z, H611B, H611C, H615C, H615D, H7006, H7007, H7008, H7012, H7013, H7050, H6051, H6056, H6061, H6058, H6073, H6076, H619A, H619C, H618A, H618C, H6008, H6071, H6075, H614A, H614B, H614E, H618E, H619E, H605B, H6087, H6172, H619B, H619D, H619Z, H61A0, H7060, H610A, H6059, H7028, H6198, H6049, H7031, H7032, H61A1, H61A2, H61B2, H7061, H6067, H6066, H6009, H7041, H7042, H604A, H6173, H615E, H604B, H6091, H7051, H7062, H618F, H605D

Here are a few things to know before you start.
1. How to use Govee Developer API key
2. Rate limiting

How to Use Govee Developer API Key

The Govee Developer API Key is used for authentication. Requests that require authentication will return *401Unauthorized.*

Use http header 'Govee-API-Key' to send Govee Developer API Key. You can learn how to use it in the API examples.

Rate limiting

The returned HTTP headers show your current rate limit status:

RateLimit Status	Description
RateLimit-Limit	The maximum number of requests you're permitted to make.
RateLimit-Remaining	The number of requests remaining in the current rate limit window.
RateLimit-Reset	The time at which the current rate limit window resets in UTC epoch seconds.

Note There are two levels of limits working together. Please make sure your design would not reach any level of the limits. Otherwise, the HTTP response status will be 429:

(1) X-RateLimit-Limit, X-RateLimit-Remaining, X-RateLimit-Reset (this level of limit works on all APIs, which means total requests from one user can not be more than 1000 per day).

Works on All APIs	10000 per day

(2) API-RateLimit-Limit, API-RateLimit-Remaining, API-RateLimit-Reset.

DeviceList	10 per minute
DeviceControl	10 per minute per device
DeviceState	10 per minute per device

5

An example of HTTP response by Postman(a HTTP test tool)

KEY		VALUE
API-RateLimit-Remaining	ⓘ	9
API-RateLimit-Reset	ⓘ	1648537626
API-RateLimit-Limit	ⓘ	10
Vary	ⓘ	Origin
Access-Control-Allow-Origin	ⓘ	*
X-RateLimit-Limit	ⓘ	10000
X-RateLimit-Remaining	ⓘ	9990
X-RateLimit-Reset	ⓘ	1648623756
Content-Type	ⓘ	application/json; charset=utf-8
X-Response-Time	ⓘ	2488ms
X-traceId	ⓘ	b41600a0-af2e-11ec-95cf-4fbe2c61925f

Cookies Headers (15) Test Results   Status: 200 OK Time: 2.50 s

Govee Developer API

DeviceList

GET /v1/devices

Get information about all supported devices in the account.

Request Headers

Govee-API-Key : {*your_Govee_API_KEY*}

Response Body parameters

Content Type : application/json

code

   The code value will be 200 when the request process successfully.

   Type: number

   Required: Yes

message

   The message value will be "success" when the request process successfully. Or it will be the error message.

   Type: string

   Required: Yes

data

   The response data.

   Type: object

   Required: Yes

data.devices

Return your devices supported by the Govee Developer API.

Type: array

Required: Yes

data.devices.model

Product Model of your device.

Type: string

Required: Yes

data.devices.device

Mac address of your device. Use device and model to identify the target one device.

Type: string

Required: Yes

data.devices.controllable

Controllable will be true when the device support commands to control.

Valid Values: true, false

Type: bool

Required: Yes

data.devices.retrievable

Retrievable will be true when the device support querying the current device state.

Valid Values: true, false

Type: bool

Required: Yes

data.devices.supportCmds

Commands supported by the device.

Valid Values in the array: "turn", "brightness", "color", "colorTem"

Type: array

Required: Yes

Errors

AuthorizationError
    Indicates that the Govee Developer API key is invalid.
    HTTP Status Code: 403
InternalError
    Indicates an internal service error.
    HTTP Status Code: 500

Example

Sample Request

```
Request URL: https://developer-api.govee.com/v1/devices
Request Method: GET
Request Header:
Govee-API-Key: 00000000-729c-4b82-b536-000000000
```

Sample Response

```
{
  "data": {
    "devices": [
      {
        "device": "99:E5:A4:C1:38:29:DA:7B",
        "model": "H6159",
        "deviceName": "test light",
        "controllable": true,
        "retrievable": true,
        "supportCmds": [
          "turn",
          "brightness",
          "color",
          "colorTem"
        ],
        "properties": {
              "colorTem": {
                  "range": {
                      "min": 2000,
                      "max": 9000
                    }
```

```
        }
      }
    },
    {
      "device": "34:20:03:2e:30:2b",
      "model": "H5081",
      "deviceName": "Smart Plug",
      "controllable": true,
      "retrievable": true,
      "supportCmds": [
        "turn"
      ]
    }
  ]
},
"message": "Success",
"code": 200
}
```

DeviceControl

Use supported commands to control the device.

Request Headers

Content-Type : application/json
Govee-API-Key : {*your_Govee_API_KEY*}

Request Body parameters

device

    The Mac address of the device you want to control.

    Type: String

    Required: Yes

model

    The Model of the device you want to control

    Type: String

    Required: Yes

cmd

    Device commands.

    Type: object

    Required: Yes

cmd.name

    Device commands. Use with `cmd.value`.
    Valid values: "turn", "brightness", "color", "colorTem"
    Type: object

    Required: Yes

cmd.value

    Device commands. Use with `cmd.name`.

    Type: number

    Required: Yes

    Demos:

{"name": "turn", value: "off"}

{"name": "brightness", value: 10}

{"name": "color", value: {"r": 255, "g": 255, "b": 255}}

{"name": "colorTem", value: 7000}

When cmd.name is "turn":
the valid values are "on" and "off".
Type: string

When cmd.name is "brightness":
the valid values are between 0 and 100, and 0 will turn off the device
Type: number

When cmd.name is "color":
Type: object
cmd.value.r
        Red value. Valid range is 0~255.
        Type: number
cmd.value.g
        Green value. Valid range is 0~255.
        Type: number
cmd.value.b
        Blue value. Valid range is 0~255.
        Type: number

When cmd.name is "colorTem":
the valid values are returned by DeviceList, there will be one more field
named "properties".

```
    "properties": {
                "colorTem": {
                    "range": {
                        "min": 2000,
                        "max": 9000
                    }
                }
            }
```


Response Body parameters
Content Type : application/json

code

The code value will be 200 when the request process successfully.

Type: number

Required: Yes

message

The message value will be "success" when the request process successfully. Or it will be the error message.

Type: string

Required: Yes

data

The response data.

Type: object

Required: Yes

Errors

AuthorizationError
    Indicates that the Govee Developer API key is invalid.
    HTTP Status Code: 403
InternalError
    Indicates an internal service error.
    HTTP Status Code: 500
InvalidParameter
    Indicates that a request parameter does not comply with the associated constraints.
    HTTP Status Code: 400

Example

Sample Request 1

Request URL: https://developer-api.govee.com/v1/devices/control
Request Method: PUT
Request Header:

```
Content-Type : application/json
Govee-API-Key : 00000000-729c-4b82-b536-000000000
Request body
{
  "device": "34:20:03:15:82:ae",
  "model": "H6089",
  "cmd": {
    "name": "turn",
    "value": "on"
  }
}
```

Sample Request 2

```
Request URL: https://developer-api.govee.com/v1/devices/control
Request Method: PUT
Request Header:
Content-Type : application/json
Govee-API-Key : 00000000-729c-4b82-b536-000000000
Request body
{
  "device": "34:20:03:15:82:ae",
  "model": "H6089",
  "cmd": {
    "name": "brightness",
    "value": 50
  }
}
```

Sample Request 3

```
Request URL: https://developer-api.govee.com/v1/devices/control
Request Method: PUT
Request Header:
Content-Type : application/json
Govee-API-Key : 00000000-729c-4b82-b536-000000000
Request body:
{
  "device": "34:20:03:15:82:ae",
  "model": "H6089",
  "cmd": {
    "name": "color",
    "value": {
      "r": 255,
      "g": 255,
      "b": 255
```

```
    }
  }
}
```

Sample Request 4

```
Request URL: https://developer-api.govee.com/v1/devices/control
Request Method: PUT
Request Header:
Content-Type : application/json
Govee-API-Key : 00000000-729c-4b82-b536-000000000
Request body
{
  "device": "34:20:03:15:82:ae",
  "model": "H6089",
  "cmd": {
    "name": "colorTem",
    "value": 7000
  }
}
```

Sample Response

```
{

  "code": 200,

  "message": "Success",

  "data": {}

}
```

DeviceState

Query the device state.

Request Headers
Content-Type : application/json
Govee-API-Key : {*your_Govee_API_KEY*}

Request Query parameters
device
>The Mac address of the device you want to control.
>
>Type: String
>
>Required: Yes

model
>The Model of the device you want to control
>
>Type: String
>
>Required: Yes

Response Body parameters
Content Type : application/json

code

>The code value will be 200 when the request process successfully.
>
>Type: number
>
>Required: Yes

message

>The message value will be "success" when the request process successfully. Or it will be the error message.

Type: string

Required: Yes

data

The response data.

Type: object

Required: Yes

data.model

Product Model of your device.

Type: array

Required: Yes

data.device

Mac address of your device.

Type: string

Required: Yes

data.name

Your device name.

Type: string

Required: Yes

data.properties

Device states.

Demos:
{"online": "false"}
{"powerState" : "off"}
{"brightness" : 60}
{"color": {"r": 255, "g" : 255, "b", 255}}
{"colorTem": 5000}

Type: arr

Required: Yes

Note: "online" is implemented through the cache. Sometimes it may return wrong state. We suggest the third-party developers to ensure that even if online returns "false", the users are allowed to send control commands, then even if there the cache is wrong, the users can still control the device.

Errors

AuthorizationError
    Indicates that the Govee Developer API key is invalid.
    HTTP Status Code: 403
InternalError
    Indicates an internal service error.
    HTTP Status Code: 500
InvalidParameter
    Indicates that a request parameter does not comply with the associated constraints.
    HTTP Status Code: 400

Example

Sample Request

Request URL: https://developer-api.govee.com/v1/devices/state?
device=06%3A7A%3AA4%3AC1%3A38%3A5A%3A2A%3A8D&model=H61
48
Request Method: GET
Request Header:
Govee-API-Key : 00000000-729c-4b82-b536-000000000
Request Query Parameters:
device: 06:7A:A4:C1:38:5A:2A:8D
model: H6148

Sample Response

```
{
  "data": {
    "device": "C6:EA:B8:56:C8:C6:89:BE",
    "model": "H6188",
    "properties": [
      {
```

```
      "online": "false"
    },
    {
      "powerState": "off"
    },
    {
      "brightness": 82
    },
    {
      "color": {
        "r": 0,
        "b": 0,
        "g": 0
      }
    }
  ]
},
"message": "Success",
"code": 200
}
```

Version history

Version 1.7

1, rate limit rules update (see Rate limiting)

Version 1.5

1, Support H7031, H7032, H61A1, H61A2, H61B2, H7061, H6067, H6066, H6009, H7041, H7042, H604A, H6173, H615E, H604B, H6091, H7051, H7062, H618F, H605D

Version 1.4

1, Support H605B, H6087, H6172, H619B, H619D, H619Z, H61A0, H7060, H610A, H6059, H7028, H6198, H6049

Version 1.3

1, Support H7050, H6051, H6056, H6061, H6058, H6073, H6076, H619A, H619C, H618A, H618C, H6008, H6071, H6075 , H614A, H614B, H614E, H618E, H619E

Version 1.2

1, Support H6050, H6154, H6143, H6144, H6072, H6121, H611A, H5080, H6062, H614C, H615A, H615B, H7020, H7021, H614D, H611Z, H611B, H611C, H615C, H615D, H7006, H7007, H7008, H7012, H7013

2, The change of DeviceState:
When cmd.name is "colorTem":
    the valid values are returned by DeviceList, there will be one more field named "properties".

```
"properties": {
            "colorTem": {
                "range": {
                    "min": 2000,
                    "max": 9000
                }
            }
        }
```