

# MIYO Cube WebSocket API

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# MIYO Cube WebSocket API

## 1 UPnP discovery

Relevant response parts:

SERVER: miyocube/\*VERSION\_NUMBER\*

UDN: uuid:{\*CUBE\_ID\*}::upnp:rootdevice

## 2 Avahi/Bonjour

Miyocube.local

## 3 WebSocket request

Port 3810, json, case-sensitive

**ws://\*IP\*:3810**

### Example:

```
{
  "id": 1,
  "apiKey": "{abc-def-123}",
  "method": "Device.all",
  "params": {
    "circuitId": "{abc-1234-defg}",
    "deviceId": "{abc-1234-defg}"
  }
}
```

A notification contains the „id“: -1 and the array „notification“ with the info about the changes, for example „Device.stateChanged“, „Circuit.stateChanged“, „Weather.changed“...

### Example:

```
{
  "id": -1,
  "notification": "Device.stateChanged",
  "params": {
    "deviceId": "{abc-1234-defg}",
    "type": "rssi",
    "value": -41
  }
}
```

## 4 Methods without Authentication key

“Link.all” - Provides a new apiKey, if a new access is allowed. A button push on the cube or „allowlink“ allow access for 15 minutes or one time request.

“System.update”- Schedules the next update. Won't start immediately. See „config“ and updateStatus.

## 5 Methods with Authentication key

### Authentication parameter

apiKey	required	Authentication key	String
--------	----------	--------------------	--------

## 6 Device (Sensors und Valves) Methods:

“Device.all” - Provides information of all devices.

“Device.free” - Provides only unassigned devices (all which are not assigned to a irrigation area).

“Device.remove” - Deletes a device.

deviceId	required	ID of the device	String
----------	----------	------------------	--------

“Device.teachin” - Teaches a device, which is activated with a magnet.

“Device.highlight” - Activates LED at chosen device.

deviceId	required	ID of the device	String
----------	----------	------------------	--------

# MIYO Cube WebSocket API

## Example:

```
{
  "id": 0,
  "params": {
    "devices": {
      "{16762df9-c3b7-4f68-b8af-ccd47e7eddb5};1": {
        "channel": 1,
        "deviceTypeId": "valve",
        "firmware": "1.10.0",
        "id": "{16762df9-c3b7-4f68-b8af-ccd47e7eddb5}",
        "ipv6": "fe80::211:7d00:30:edbc%zmd0",
        "lastUpdate": 1527235914,
        "name": "viRaValve",
        "stateTypes": {
          "0": {
            "type": "valveInitialClose",
            "value": false
          },
          "1": {
            "type": "valveStatus",
            "value": false
          },
          "10": {
            "type": "lastChargingTime",
            "value": 1527235914
          },
          "11": {
            "type": "lowPower",
            "value": false
          },
          "12": {
            "type": "otauPossible",
            "value": false
          },
          "13": {
            "type": "otauProgress",
            "value": 0
          },
          "14": {
            "type": "otauStatus",
            "value": ""
          },
          "15": {
            "type": "winterMode",
```

```
"value": false
},
"16": {
  "type": "chargingDurationWeekly",
  "value": 81
},
"17": {
  "type": "chargingDurationDay",
  "value": 11.571428571429
},
"18": {
  "type": "charging",
  "value": true
},
"19": {
  "type": "chargingLess",
  "value": false
},
"2": {
  "type": "openValve",
  "value": false
},
"20": {
  "type": "clientChargingTime",
  "value": 0
},
"3": {
  "type": "lastIrrigationStart",
  "value": 0
},
"4": {
  "type": "lastIrrigationEnd",
  "value": 1527033928
},
"5": {
  "type": "lastIrrigationDuration",
  "value": 1527033928
},
"6": {
  "type": "rssi",
  "value": -78
},
"7": {
  "type": "reachable",
```

# MIYO Cube WebSocket API

```
"value": true
},
"8": {
  "type": "solarVoltage",
  "value": "4.25"
},
"9": {
  "type": "sunWithinWeek",
  "value": true
}
},
"{db31afa8-f851-4f26-81a2-c50f34c9068c};1": {
  "channel": 1,
  "deviceTypeId": "moistureOutdoor",
  "firmware": "",
  "id": "{db31afa8-f851-4f26-81a2-c50f34c9068c}",
  "ipv6": "fe80::211:7d00:30:eba3%zmd0",
  "lastUpdate": 1527033850,
  "name": "viRaMoistureSensor",
  "stateTypes": {
    "0": {
      "type": "moisture",
      "value": 0
    },
    "1": {
      "type": "brightness",
      "value": 3238
    },
    "10": {
      "type": "sunWithinWeek",
      "value": false
    },
    "11": {
      "type": "lastChargingTime",
      "value": 1526036974
    },
    "12": {
      "type": "lowPower",
      "value": false
    },
    "13": {
      "type": "otauPossible",
      "value": false
    }
  }
}
```

```
,
"14":{
  "type": "otauProgress",
  "value": 0
},
"15":{
  "type": "otauStatus",
  "value": ""
},
"16":{
  "type": "winterMode",
  "value": false
},
"17":{
  "type": "chargingDurationWeekly",
  "value": 0
},
"18":{
  "type": "chargingDurationDay",
  "value": 0
},
"19":{
  "type": "charging",
  "value": false
},
"2":{
  "type": "temperature",
  "value": 28
},
"20":{
  "type": "chargingLess",
  "value": true
},
"21":{
  "type": "clientChargingTime",
  "value": 0
},
"3":{
  "type": "frequency",
  "value": 0
},
"4":{
  "type": "irrigationNecessary",
  "value": false
}
```

```
},
"5":{
  "type": "irrigationPossible",
  "value": false
},
"6":{
  "type": "temperatureOffset",
  "value": 0
},
"7":{
  "type": "rssi",
  "value": -100
},
"8":{
  "type": "reachable",
  "value": false
},
"9":{
  "type": "solarVoltage",
  "value": 0
}
}
}
},
"status": "success"
}
```



## Array

id		String
status		String
params		Object
devices	List of all devices	Object

## 7 Circuit Methods

“Circuit.all” - Provides information of all irrigation areas.

“Circuit.status” - Provides information of a irrigation area, analog to „all“ refers to just one area.

circuitId	required	ID of the device	String
-----------	----------	------------------	--------

“Circuit.types” - Provides all possible types for soil composition, irrigation tools, plants and location.

circuitId	required	ID of the device	String
-----------	----------	------------------	--------

“Circuit.add” - Adds a new irrigation area.

circuitId	required	ID of the device	String
sensorId	required	ID of the the sensor in the circuit	String
name	required	Name of the circuit	String

# MIYO Cube WebSocket API

“Circuit.edit” - Edits a irrigation area.

circuitId	required	ID of the device	String
borderTop	not required	Humidity border	String
borderBottom	not required	Humidity border	String
considerMower	not required	Consider extern mower	boolean
day0 (day1, day2, day3, day4, day5, day6)	not required	Allowed irrigation time format: 6:00-13:00;14:00-15:21	String

“Circuit.irrigation” - Starts or stops the irrigation.

circuitId	required	ID of the device	String
mode	required	start or stop	String
duration	not required	Duration of the irrigation	String

“Circuit.remove” - Deletes a irrigation area.

circuitId	required	ID of the device	String
-----------	----------	------------------	--------

“Circuit.winter” - Activates or deactivates the wintermode.

circuitId	required	ID of the device	String
winter	required	Turning winter mode on or off	Boolean

# MIYO Cube WebSocket API

“Circuit.log” - Provides a statistic.

circuitId	required	ID of the device	String
timeFilters			Array of Objects
endDate			String
endDate			String

## Example:

```
{
  "id": 0,
  "params": {
    "circuits": {
      "{abc-1234-defg}": {
        "id": "{abc-1234-defg}",
        "name": "Test",
        "params": {
          "automaticMode": false,
          "borderBottom": "60",
          "borderTop": "80",
          "considerMower": false,
          "day0": "",
          "day1": "",
          "day2": "",
          "day3": "",
          "day4": "",
          "day5": "",
          "day6": "",
          "irrigationType": 0,
          "locationType": 0,
          "plantType": 1,
          "soilType": 0,
          "valveStaggering": true
        },
        "sensor": "0",
        "sensorValve": {
          "channel": 1,
          "valve": "{abc-1234-defg}"
        },
        "stateTypes": {
          "0": {
            "type": "irrigation",
```

```
"value": false
},
"1": {
  "type": "automaticMode",
  "value": false
},
"2": {
  "type": "winterMode",
  "value": false
},
"3": {
  "type": "irrigationNextStart",
  "value": 0
},
"4": {
  "type": "irrigationNextEnd",
  "value": 0
},
"5": {
  "type": "valveStaggeringIndex",
  "value": 0
}
},
"valves": {
  "0": {
    "channel": 1,
    "valve": "{abc-1234-defg}"
  }
}
}
},
"status": "success"
}
```

## Array

params		Object
circuits	List of all circuits	Object
id	ID of the circuit	String
name	Name of the circuit	String

## 8 Extern Methods

“Extern.status” - Provides current data of extern devices „rain“, „temperature“, „wind“ and „mower“.

“Extern.rain” - Informs MIYO about rain.

rain	required		boolean
------	----------	--	---------

“Extern.wind” - Defines if wind force is too strong.

wind	required		boolean
------	----------	--	---------

“Extern.block” - Permits or prohibits the irrigation, for example during a party.

circuitId	required	ID of the device	String
block	required		boolean

“Extern.mower” - Defines if a mower is currently active or not. The value considerMower in Circuit.edit must be set to “true”.

circuitId	required	ID of the device	String
running	required		boolean

“Extern.temperature” - Provides the temperature of extern devices.

### Example:

```
{
  "id": 0,
  "params": {
    "mower": true,
    "rain": false,
    "temperature": false,
    "wind": false
  },
  "status": "success"
}
```

## Array

mower		
rain		
temperature		
wind		

## 9 System Methods

“System.status” - Provides information about the cube.

“System.time” - Provides current local time and timezone.

“System.timezone” - Provides all timezones.

“System.weather” - Provides the weather.

“System.reboot” - Restarts the cube.

“System.reset” - Reset to factory settings.

“System.reconnect” - Reconnects the cube.

“System.position” - Sets the GPS Position of the cube (necessary for weather forecast).

lon	required	Longitude	String
lat	required	Latitude	String

“System.allowlink” - Allows a new user.

“System.cloud” - Activates or deactivates the cloud connection.

allowed	required	Activates or deactivates the cloud connection	boolean
---------	----------	---	---------

“System.timezone” - Sets timezone of the cube.

timezone	required	startDate and endDate	String
----------	----------	-----------------------	--------

# MIYO Cube WebSocket API

## Example:

```
{  
  "id": 0,  
  "params": {  
    "cloudAllowed": true,  
    "lat": "",  
    "linkMode": false,  
    "lon": "",  
    "updateStatus": 0,  
    "uuid": "{abc-1234-defg}",  
    "version": "0.90.1"  
  },  
  "status": "success"  
}
```

## Array

cloudAllowed	If cloud connection is allowed	boolean
lat	Latitude	
linkMode	Allows access for 15 minutes or onetime request.	boolean
lon	Longitude	
UpdateStatus	"0" - not scheduled "1" - scheduled "2" - checking device "3" - installing "4" - error at last update	String
uuid	UUID	String
version	Currently installed firmware version	String
clock		Object
timestamp	UNIX time	Unsigned Integer
timezone	timezone	String

## 10 Logging Methods

Endpoint URL "Logging.entries"

Example:

```
{
  "id": 0,
  "params": {
    "history": [
      {
        "circuitId": "{abc-1234-defg}",
        "deviceId": "{abc-1234-defg}",
        "source": "LoggingSourceState",
        "stateTypeId": "irrigation",
        "timestamp": 1526020572000,
        "value": "false"
      },
      {
        "circuitId": "{abc-1234-defg}",
        "deviceId": "{abc-1234-defg}",
        "source": "LoggingSourceState",
        "stateTypeId": "irrigation",
        "timestamp": 1526025137000,
        "value": "false"
      },
      {
        "circuitId": "{abc-1234-defg}",
        "deviceId": "{abc-1234-defg}",
        "source": "LoggingSourceState",
        "stateTypeId": "irrigation",
        "timestamp": 1526032918000,
        "value": "false"
      },
      {
        "circuitId": "{abc-1234-defg}",
        "deviceId": "{abc-1234-defg}",
        "source": "LoggingSourceState",
        "stateTypeId": "solarVoltage",
        "timestamp": 1526037953000,
        "value": "4.01"
      },
      {
        "circuitId": "{abc-1234-defg}",
        "deviceId": "{abc-1234-defg}",
        "source": "LoggingSourceState",
```



# MIYO Cube WebSocket API

```
"stateTypeId": "lastChargingTime",  
"timestamp": 1526037953000,  
"value": "1526037953"  
}  
],  
"status": "success"  
}
```

## Array

circuitId		String
deviceId		String
stateTypeId		String
timestamp		Unsigned Integer
value		String

## 11 Objects

### 11.1 Circuit

id		
name		String
automaticMode		Boolean
borderBottom	Humidity border	String
borderTop	Humidity border	String
day0		
irrigationType		Integer
locationType		Integer
plantType		Integer
soilType		Integer
valveStaggering		boolean
sensor		
stateTypes		
valves		Object

### 11.2 Devices

#### 11.2.1 Valve

channel		Unsigned integer
deviceTypeId	Type of the device	String
firmware	Currently installed firmware version	String
id	ID of the device	String
ipv6	IPv6	String
lastUpdate	The UNIX time when the device was last updated	Unsigned integer
name	Name of the device	String

# MIYO Cube WebSocket API

stateTypes	List of all stateTypes	Object
type	Name of the stateType	String
value	Value of the stateType	

## 11.2.2 Sensor

channel		Unsigned integer
deviceTypeId	Type of the device	String
firmware	Currently installed firmware version	String
id	ID of the device	String
ipv6	IPv6	String
lastUpdate	The UNIX time when the device was last updated	Unsigned integer
name	Name of the device	String
stateTypes	List of all stateTypes	Object
type	Name of the stateType	String
value	Value of the stateType	

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